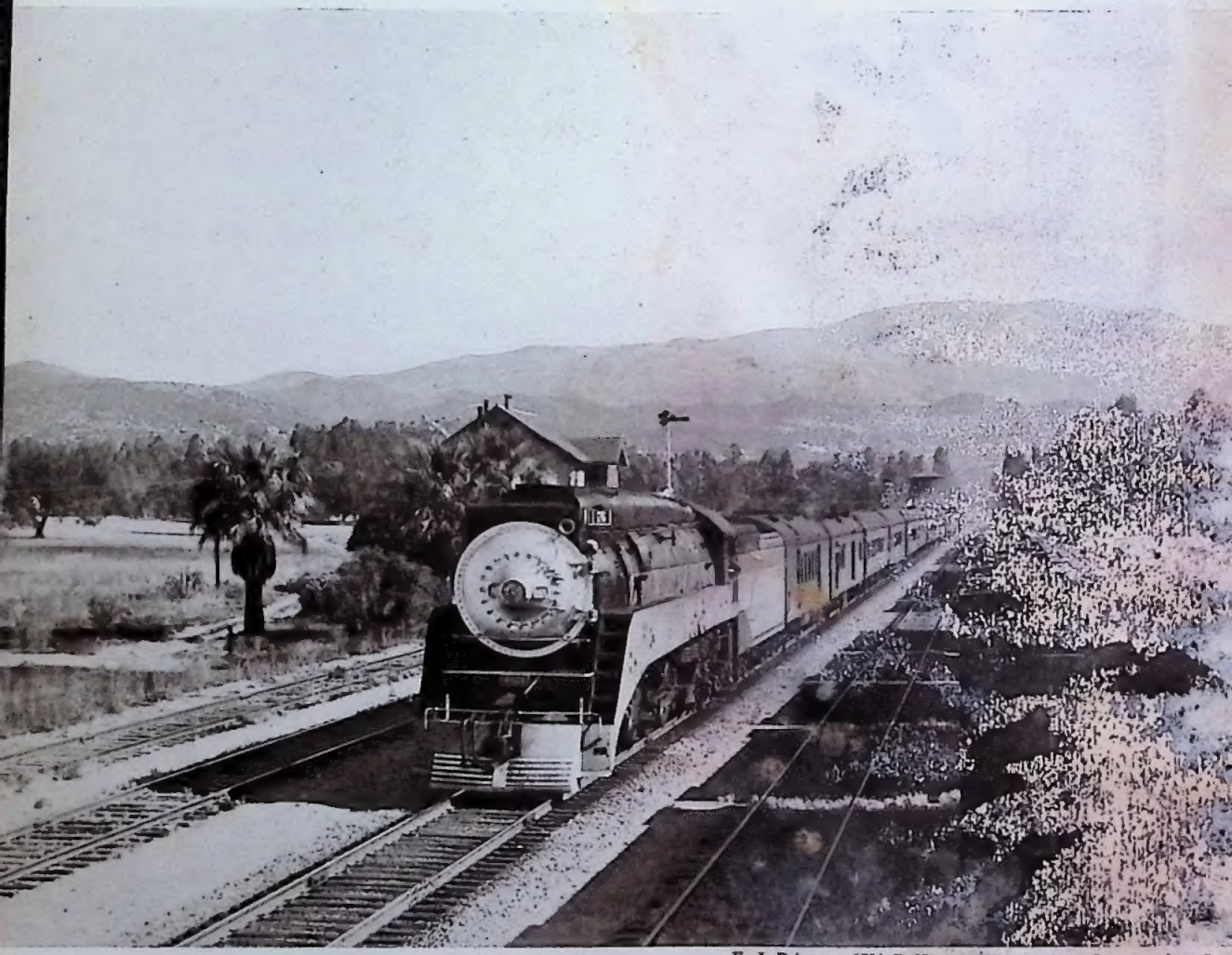
Trains

AUGUST '42

25¢

Jack Thode collection. See page 2.



F. J. Peterson, 1784 S. New Hampshire Ave., Los Angeles 6, Calif.

The Lark on the last lap of its overnight journey.

Behind a Lima-built streamlined 4-8-4 *Daylight* type engine, the Southern Pacific's all-Pullman *Lark* from San Francisco, 15 cars long, swings down the last lap into Los Angeles. In the background are the Santa Susana Mountains which the train has just crossed, and behind the locomotive is Chatworth station, 28 miles out of Los Angeles. Aside, perhaps, from the *Daylight* streamliners, the now-streamlined *Lark*, with its double bedroom, roomette, drawing room, and compartment cars, is the SP's pride and joy on its Pacific Coast run. This picture was taken in 1939, before the train had been re-equipped with Pullman-built lightweight cars.

On the cover.

Out of a snow-framed tunnel on the Silverton Branch of the D&RGW steams narrow gauge No. 227 (front cover), last of the Grant engines on the Grande. No. 228 was a Baldwin. These little engines are the mechanical version of the mountain mule, and have hauled plenty of freight through almost impassable country since the first Rocky Mountain narrow gauge lines were built 70 years ago.

Trains

Editors: A. C. Kalmbach, Linn H. Westcott, Willard V. Anderson

Vol. 2 August, 1942 No. 10

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Waybills decoration by courtesy of New Haven Register.

Waybills

Our family always enjoys picnics and never misses an opportunity to have one. The favorite spot is on the bank of nearby brook and, of course, the mainline railroad. At the first murmur of a locomotive whistle, there's a scamper down the path to the picturesque stone railroad fill. After the excitement of locomotive and the rain of cinders we often count cars and look for initials of far-away roads, but most fun of all is guessing where the cars are going. Perhaps those dripping with ice are loaded with grapefruit for Boston breakfasts, and the creosoted poles may be for a telephone line to a new army camp. It's hard to tell where box cars are going, but there's a hint when they are marked with "Explosive" or "Paper, do not hump."

Most revealing of all is the flat car with its crates marked, in big black letters, "Moscow, U.S.S.R.," or carrying a string of bulldozers, perhaps for the Alaska highway. Here are two more, one with a ring-like stator for the power plant at Shasta Dam, the other with a narrow-gauge locomotive for a Western lumber company.

And when the last car has gone and the smoke has become only a slight tinge in the blue sky, we talk about other trains we've seen. Remember the gaudy refrigerator cars painted with pictures and odd letters—Baby Ruth, Schlitz, Milky Way, Hormel, and dozens of others? They're very scarce now, but in their place have come the box cars bearing slogans, "Everywhere West," "Route of the 400's," and the Santa Fe's convenient "hobo's road map" showing the system from one end to the other.

Why not a soup-and-cinders picnic for *your* family this week?

L. H. W.

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Prize Winners

★ We present the nine ranking photos from 150 in the Railroadians of America rail-photo salon.

THE steam locomotive is extremely photogenic. Any camera exhibit will inevitably include a number of locomotive or train pictures, and thousands of camera fans take nothing but engine pictures. About this interest the Railroadians of America built its first railroad photographic exhibit and contest.

The Railroadians are a society of men whose avocation is railroading. Members are in all parts of the country, but interest centers in the monthly meetings in New York City. Books, chiefly of historical interest, are published at intervals and sent to all members.

The Railroadians' first salon was organized under the direction of A. Sheldon Pennoyer, the artist, and with the cooperation of the Camera Club of New York. The 150 photos entered were shown for half a month at the Camera Club rooms, and were judged for awards by Beaumont Newhall, curator of photography at the Museum of Modern Art; Norris Harkness, photographic editor of the *Evening Sun*, and Freeman Hubbard, editor of *Railroad Magazine*.

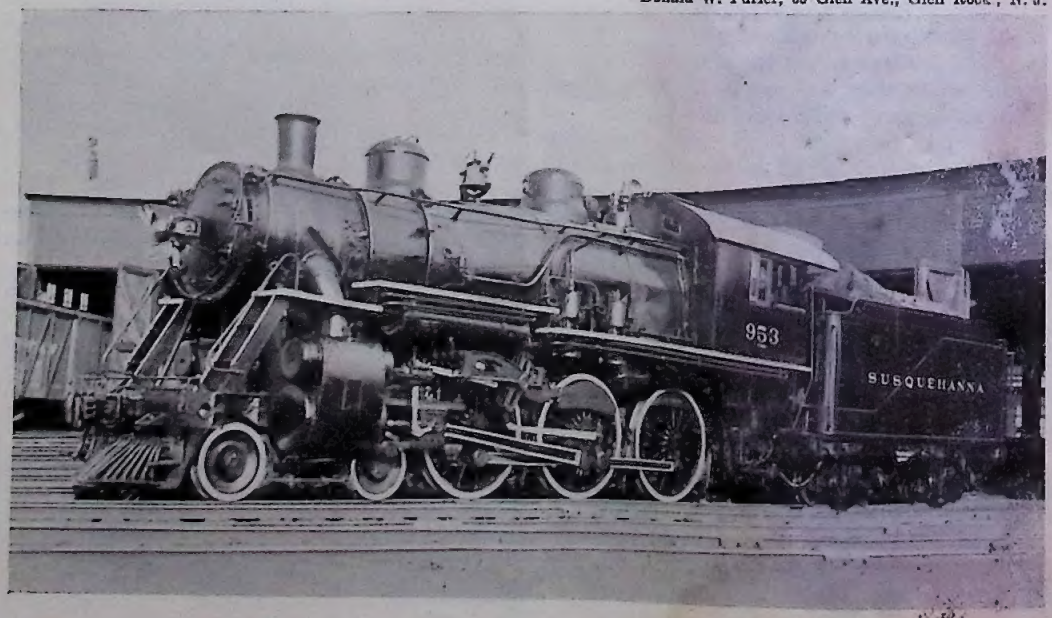
Prizes were divided among three classes of photos: motive power and equipment not in motion, speed and action shots, and fine photography embracing composition, quality of work, or pictorial effects. The exhibit turned out to be remarkably successful in creating public interest in the railroads as photographic subject matter, and the society expects as a result to make this an annual event.

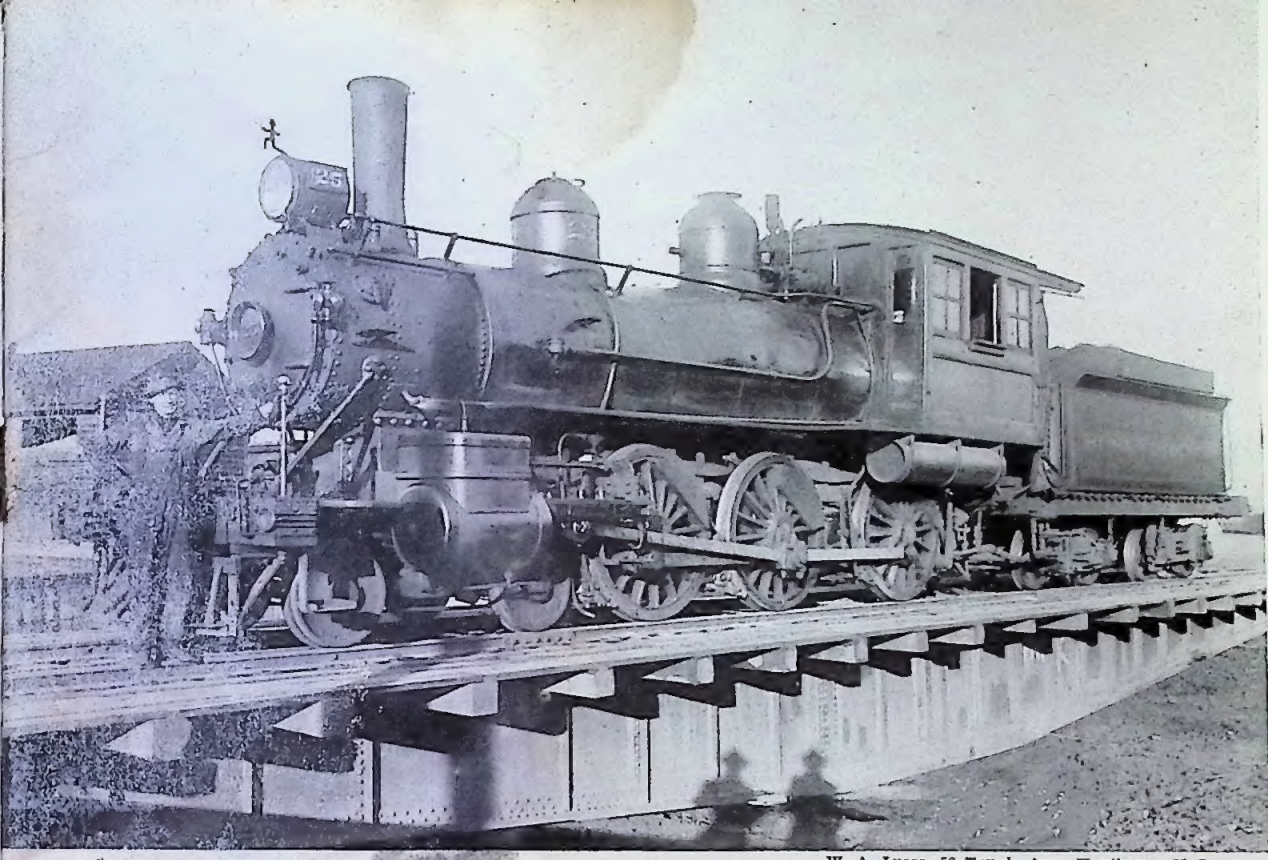
Three pictures of two Susquehanna engines.

In the still-picture group two locomotives of the New York, Susquehanna & Western stole the show. Erie 953, below, is now Susquehanna 953, opposite page. The Susquehanna, originally an independent road, was controlled by the Erie from 1898 until recently, but now is on its own again.

Second Prize
Still Views

Donald W. Furler, 65 Glen Ave., Glen Rock, N. J.





W. A. Lucas, 56 Tuxedo Ave., Hawthorne, N. J.

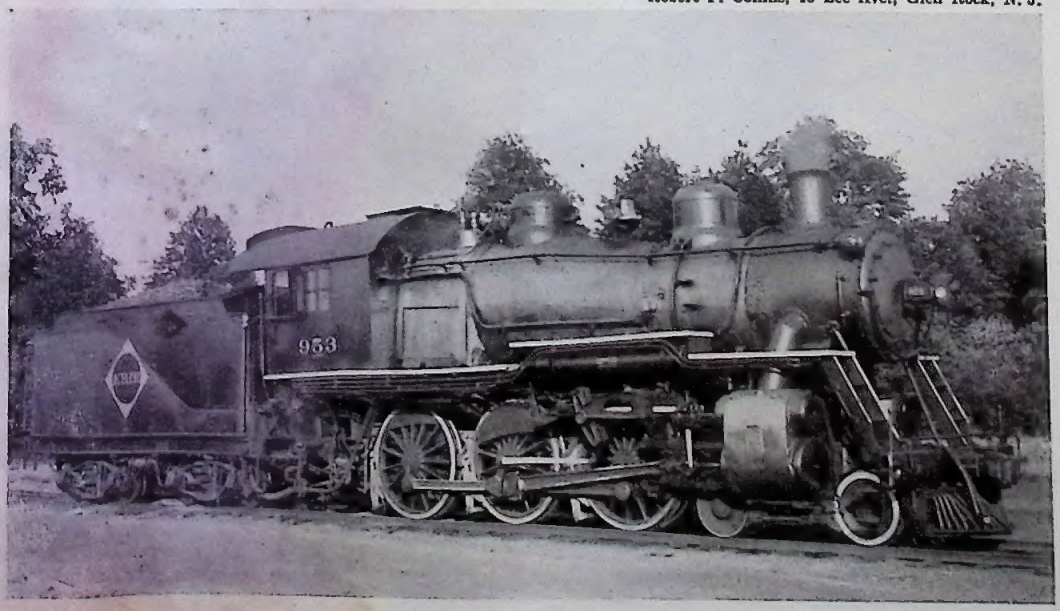
First Prize
Still Views

No. 25 was one of two similar but not identical Ten-Wheelers pulling heavy passenger trains on the Susquehanna years ago. Originally it was No. 1 of the affiliated Wilkes Barre & Eastern, now abandoned, and it ended its days on the Susquehanna with the name of engineer Philip T. Nixon on its cab. It was the last engine Mr. Nixon ran before his retirement.

Third Prize
Still Views

In the last few years the rejuvenated and aggressive Susquehanna has purchased power and cars from the Erie, including No. 953, and, with two oil-engined streamliners and a community of interest with the New York, Ontario & Western, is making a good showing. Notice that best engine pictures have rods down.

Robert F. Collins, 16 Lee Ave., Glen Rock, N. J.



Double-heading on the old South Park.

First Prize
Action

Mail carrier Otto Perry caught all the glory and action of the narrow-gauge to win a first prize. For all practical purposes the old South Park is gone. It was the Denver, South Park & Pacific, stretching half across Colorado to beyond Gunnison, then was part of the Union Pacific System, and finally Colorado & Southern, part of the Burlington System. At the height of its glory it was 400 miles of three-foot-gauge track, but now only 13.7 miles remains in service between Climax and Leadville, along with 20 miles of seldom used track southwest from Denver to Waterton. This picture was taken as the freight left Waterton for Denver a year or so ago. The cinder chute on the front locomotive was characteristic of Colorado & Southern narrow-gauge power.

Comin' and goin' on the Union Pacific.

Second Prize
Action

This took luck, or planning, or both. The caboose and engine of two Union Pacific freights might pass anywhere along the main line near North Platte, but this time they passed right in front of Arthur Stensvad's camera. The giant stack and the long smokebox are typical of UP engines.

The din of two 4-8-4's up Cajon Pass.

Third Prize
Action

A railroad action picture is not only the photo itself but the sounds it brings to ear. To the railroad lover there can be no sound more impressive than the exhaust of a team double-heading upgrade. Eastward out of San Bernardino go these two Santa Fe 4-8-4's, starting the attack on Cajon Pass [October 1941 TRAINS] with the *Super-Chief*, old standard equipment. The helper will cut off at Summit; the other engine will run through 1200 miles to La Junta, Colo.

Lucius Beebe, from *High Iron* (D. Appleton-Century Co.)

Otto C. Perry, 74 S. Elati St., Denver, Colo.

Arthur Stensvad, P. O. Box 634, North Platte, Neb.

Paul G. Pennoyer.

P. L. Jaques, 610 W. 116th St., New York, N. Y.

Railroadians of America; by J. J. Manning.

"The Last Quarter Mile."

First Prize
Pictorial

The one locomotive of the Middleburgh & Schoharie Railroad looks down the last quarter mile of track to its home terminal as it pulls the track-junking train on the job of tearing up the road. This five-mile road connected Middleburgh, N. Y., west of Albany, with the five-mile Schoharie Valley Railroad, which in turn is affiliated with the Delaware & Hudson and connects with its Susquehanna Division (Albany-Binghamton line).

Lumber locomotive at Fort Bragg, Calif.

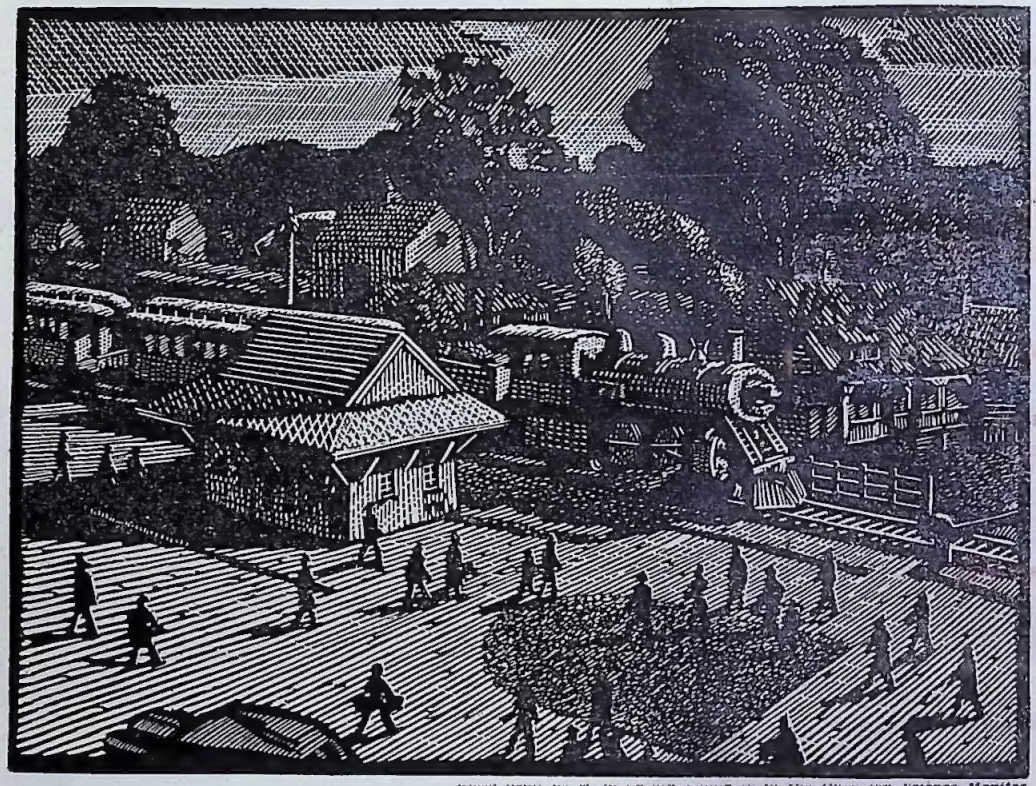
Second Prize
Still

The lumber locomotive has played a large part in building America. It is much cheaper to build temporary railroads into lumber land than to construct highways and truck the logs to sawmills. The Shays and the Climaxes, geared jobs with swivel trucks and small wheels, do a large proportion of this work, but the tank locomotive and the more standard types are not too ill at ease among the tall trees. The Hammond Lumber Company operates this road at Fort Bragg, Calif., on the coast some 140 miles north of San Francisco.

Erie Berkshire in "Railroad Wonderland."

Third Prize
Action

In the railroad wonderland of southern New York State [June TRAINS], F. L. Jaques of the American Museum of Natural History snapped an Erie Berkshire rounding a 2°-44′ curve. (See curve marker at left.) The Erie has 105 of these 2-8-4 fast freight engines, numbered from 3300 to 3404.



Block print by F. Wendroth Saunders in the *Christian Science Monitor*.

The 6:57

By F. Wendroth Saunders.

From the *Christian Science Monitor's* Forum Page.

In this day of streamliners and buses, electricity, and Diesels, the puffing steam locomotive has been called the vanishing American; but, like the bison, it may stage something of a comeback. In many communities, it has never ceased to be the indispensable link between the city and suburbs.

In the first place, you have not really left the city unless you have boarded the steam train. You may travel twice as far by bus, or three times as long by trolley; but one shriek from a locomotive whistle will conjure up a vast panorama of the wide, open spaces, something that is representative of your 5 o'clock commuter's half-acre house lot.

In our town, the station is regarded with an affection that is near to sentimentality. There is no right side nor wrong side of the railroad tracks. In fact, one can live alongside the railroad station and not lose face. True, the building is not impressive in size; but, architecturally, it is a fine example of Railroad Victorian or perhaps of the Late General Grant style. Once it was a drab cinder-gray, the standard railroad color; and, being well sunburned, it had begun to peel. One day a determined band of townspeople descended upon it and, after thoroughly scraping and polishing it, they painted the station a fire-engine red complete with white trim. It is now softened somewhat by the bright sun of several Winters. And the railroad has courteously responded to this community gesture by painting some of its cars red.

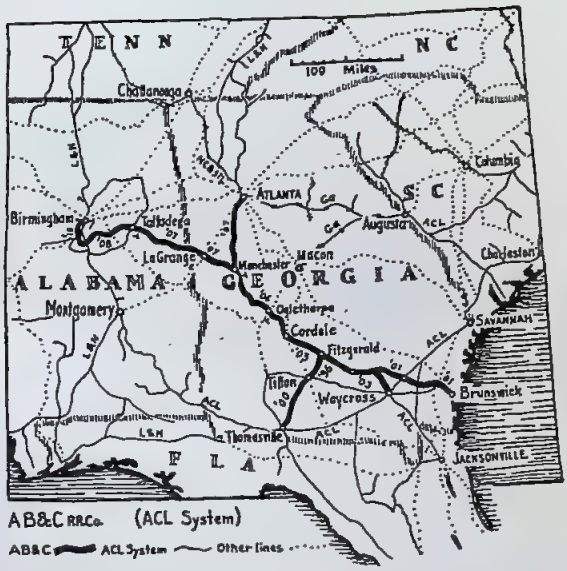
The inside of our station conforms to railroad specifications for small way-stations, except in one respect: It is a throw-back to the "carboniferous" age, for there is a man behind the ticket window with real tickets and timetables. Benches take up every available bit of wall space; while, on Winter mornings, a large, rotund stove glows red. With true Yankee thrift, the stovepipe makes numerous detours about the ceiling until the last calorie of heat has been exhausted from the smoke.

There are three morning trains a day leav-

ing our way-station, entering and departing with appropriate sound effects. As I stand on the platform and watch expectantly for a plume of smoke on the horizon, 30 years roll away as the roaring monster clatters by me and hisses to a full stop amid the nostalgic odors of hot metal and coal gas. Six days a week, my neighbors settle themselves in their seats for the half-hour journey. Here they are at their best, with a good night's sleep behind them and the cares of business yet before them.

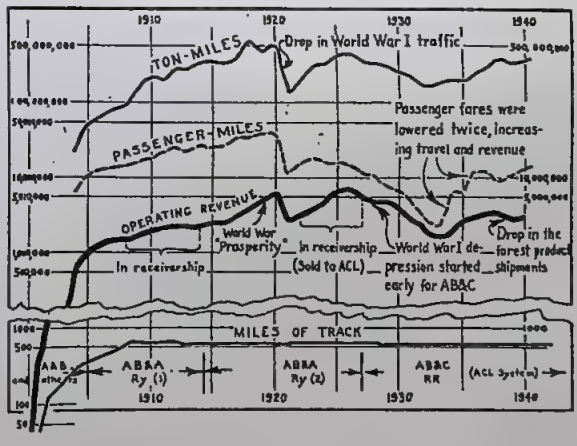
The morning train is, in reality, a men's club on wheels. Old friends hail each other; new friends are made. It is the time for a newspaper, or a story, or even a friendly game of cards on top of a newspaper when seats face each other. A good conductor knows all his "regulars" by name, and the advent of a new conductor might well bring forth a petition of protest to the authorities.

For many years, there has been a debate—which has never been settled—as to whether the elite of our town departs on the 6:57 or the 7:45. (The 8:38, of course, is for housewives spending the day in town.) Those, however, who do leave on the 7:45 have this advantage: They have an irrepressible alarm clock, for the 6:57 always whistles cheerily at the lumber yard on the edge of town. This gives your real commuter just time to shave, dress, swallow his breakfast, slap Junior on the back, remind him to be a good boy in school, kiss his—the commuter's—wife, rush for the station, and be in his place on the platform to say: "Well, George, I see she's right on time again this morning."



ABC's of the AB&C.

The Atlanta, Birmingham & Coast was one of the last railroads of its size to be built. The map shows original construction dates. Its 637.07 miles forms important links in the Atlantic Coast Line System, of which it became a part after receivership in 1926. The AB&C has eight daily passenger trains, two mixed trains, and every third day the streamlined *Dixie Flagler* uses its rails between Atlanta and Waycross. An extension to Jacksonville, planned in 1917, was suspended by the World War, and was not made later because ACL duplicates the route. At one time steamship service to New York was operated out of Brunswick by an affiliate, and the AB&C has always been an active supporter of the Georgia port. Chief originating freight is lumber, rosin, cement, gravel, and sand. From connections come citrus fruits, petroleum products, soft coal, and fertilizer. The graph shows clearly the reason for the second receivership. The first, in the midst of increasing traffic, was brought on by heavy capital expenditures in extending the road to Birmingham.



William Moedinger Jr., 23 E. Vine St., Lancaster, Pa.

Silverton Branch

★ Denver & Rio Grande Western's most remote train squeezes up the gorge of Rio de Las Animas Perdidas twice a week.

By Harold M. Mayer.

IN THE heart of the rugged San Juan Mountains of southwestern Colorado, in one of the most inaccessible parts of the United States, a little-known narrow-gauge branch line offers one of the most spectacular scenic trips to be found anywhere. In the 45 miles from Durango to Silverton, jagged snow-covered mountain peaks, deep canyons, breath-taking gorges, and vast untouched forests set the stage for railroad operation which, for its unusual character and beautiful scenery, is probably unmatched anywhere.

The Silverton Branch of the Denver & Rio Grande Western, in common with most of the narrow-gauge lines of that system, was built to serve the mining camps during the boom days of the late eighties and early nineties. In the San Juan Mountains are gold, silver, lead, copper, and zinc. These mountains are, geologically, a vast dome of volcanic lava flows which were uplifted, and then deeply eroded by numerous glaciers and streams, thus exposing many thousands of feet of volcanic rock formations criss-crossed by fissure veins which contain the rich mineral deposits. These deposits formed the economic base of a number of mining towns. Among these, in a small basin in the most inaccessible part of the mountain system, is Silverton, at an elevation of 9302 feet, completely surrounded by towering 14,000-foot peaks except for the narrow canyon of the

High on a canyon wall.

Far above the River of Lost Souls, perched on a rock ledge, is the Denver & Rio Grande Western's narrow-gauge mixed train to Silverton. This isn't such an unusual picture until you realize it was taken from the caboose of the same train. It was north of here, in similar country, that Otto Mears tried to build a north-and-south connection between Silverton and Ouray, thus to complete a north-and-south line. The country was too rough for even the veteran of Colorado railroad building, and he went around instead [see Rio Grande Southern, February TRAINS]. But the Silverton line still runs into the heart of this rugged land of rock, a gorgeous one-day scenic ride from Durango.

Rio de Las Animas Perdidas to the south, which was utilized by the railroad to connect the mining camp with the outside world.

Now, a highway connects Silverton with Durango on the south and with Montrose on the north. Over this road pass thousands of tourists each Summer. But the highway is forced over the mountains, using steep grades and hairpin turns, because the lower-gradient canyon route is far too narrow to permit the easy construction of a road or, for that matter, a standard-gauge railroad. The canyon is still the domain of the steam locomotive. Natives explain that the narrow-gauge railroad can turn on the brim of a sombrero, and in the winding gorge between Silverton and Durango the track seems almost to do just that.

At Durango, the hub of the narrow-gauge system, the inhabitants stare unbelievingly when a person mentions his plans to go to Silverton by rail. Most of the natives are completely unaware of the existence of the line, in spite of the fact that once each year a passenger excursion train is run to Silverton. This is the only regular solid passenger train to operate. One will look in vain for Chamber of Commerce literature advertising the ride; even the general office of the Rio Grande in Denver has no photographs of the line.

Service now consists of a mixed train, operating twice weekly, on Tuesdays and Saturdays. Passenger accommodation consists of a sway-backed combination passenger-baggage car, vintage of 1882, placed just ahead of the diminutive caboose on the up-bound trip, and behind it on the return. This car is itself of considerable interest; the passenger compartment is decorated with Mid-Victorian scrollwork and several once-elegant brass kerosene lamps. At the rear is a narrow, open platform, protected by an iron railing and dominated by the huge iron wheel of the hand brake.

At Durango, the metropolis of the southwestern quarter of Colorado, the narrow-gauge lines radiate in four directions. To the northwest is the Rio Grande Southern; to the south, the Farmington Branch of the D&RGW; and to the east, the more heavily constructed main line of the narrow-gauge system, to Alamosa. With all of these the Silverton Branch, to the north, interchanges what little traffic is offered.

Leaving Durango, the line, for the most part a tangent, traverses the fairly wide valley of the Las Animas. This is a stock-ranching country, and the livestock, as well as a few cash crops, furnishes traffic to the railroad, though the Silverton Branch only carries it a short distance. Not uncommonly, the train is less than half its original length when leaving the wider part of the valley just north of Durango. The valley, completely irrigated, with its fields of oats, clover and alfalfa, is prosperous-looking; there is an abundance of precipitation on the nearby mountains, and the railroad furnishes transportation for the stock to markets. Dominating the valley's flat floor on both sides are precipitous cliffs consisting of sharply inclined Permian rocks with a beautiful red color, of considerable interest to geologists. Crossing and recrossing the valley is the Rio

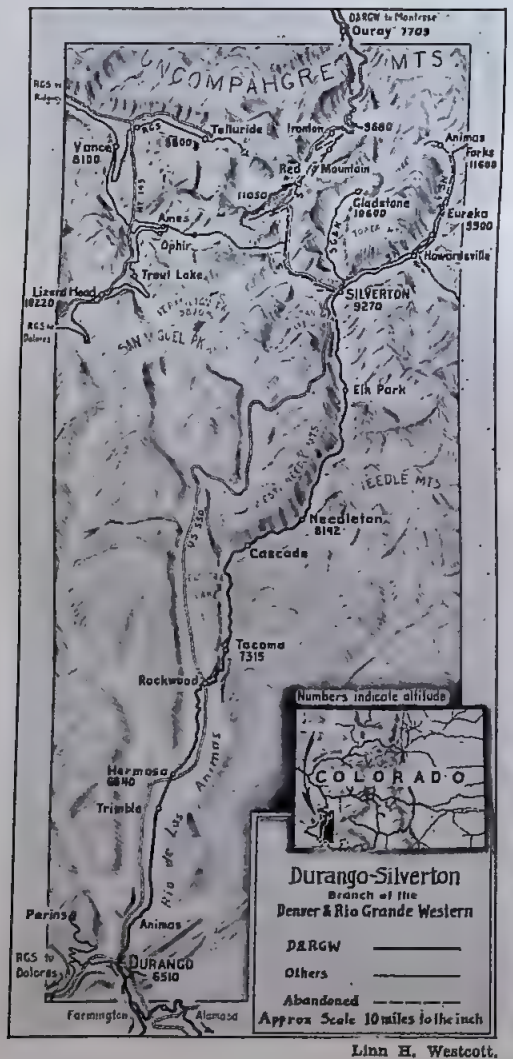
Vacation by rail.

Despite all the talk of crowded trains and possible travel rationing, many a local and branch-line train still has plenty of empty seats. For an enjoyable Summer vacation by rail, jump from town to town across nearby states and see familiar country in a new way. You'll be surprised at how much fun this can be!

de Las Animas Perdidas, the "River of Lost Souls," named, so we are told, by the early Spanish explorers in honor of members of their party who lost their lives in the foaming rapids in the gorge near Silverton.

At Hermosa, a way-station a few miles north of Durango, the little three-foot line commences to climb. A couple of miles farther north it is perched on a narrow shelf, blasted into the solid volcanic rock cliff on the west side of the valley. Between the branches of the pine and spruce trees which have found precarious foothold on the steep, rocky slopes, one catches intriguing glimpses of the flat valley below, here becoming narrower until, finally, the cliffs on either side are so close together that the river occupies the entire width of the valley floor, seething and foaming against the steep rock walls, first on one side and then on the other. Here the locomotive works hard, for the grade is four per cent and the loads are heavy. Flanges screech on the sharp curves, and in places the locomotive and caboose pass each other in opposite directions. Tributary creeks cut deep ravines which are crossed far above the tree tops by very high embankments or timber trestles. Looking out of the car, one sees nothing between the train and the roaring river, hundreds of feet below. The sensation of height, and of the far greater heights above, the sway of the primitive, diminutive cars as they rattle around the sharp curves, and the laboring puffs of the locomotive as it sends hissing blasts reverberating across the canyon, all combine in an indescribable sensation of vastness, of awe at the powers of nature and marvel at the genius of man, who conceived and built this toy railroad to overcome the natural obstacles.

In spite of the steep grade of the railroad, one becomes aware that the river is getting closer; its grade is even steeper. Finally, the narrow shelf holding the railroad on the side of the canyon is practically at the water's



Linn H. Westcott.

Map of the Silverton Branch.

North out of Durango the Silverton mixed train runs through a broad agricultural valley for a few miles, but it soon gets into rough country, and fits closely into the narrow slit of a canyon that also holds the river, close under the shadow of the West Needle Mountains. North of Silverton the Silverton Railroad once switchbacked across Red Mountain, but never got much beyond Ironton. The grade down to Ouray is too steep. The map shows how the inaccessible Uncompahgre Mountains were attacked from all sides at Ouray, at Telluride, and at Ironton and Animas.

edge, and both canyon walls tower 200 feet above the track. The gorge is here but a narrow slit in the mountains, far too narrow to accommodate a road or a standard-gauge railroad. The sky is but a thin wedge of blue, far, far above.

Here and there the train hesitates, to drop off a party of fishermen in quest of mountain trout and a week of camping, or to leave supplies for the engineer at a power station set deep in the canyon, alongside the roaring rapids. The power station disappears behind a bend in the gorge, and once again the only sign that man has ever before seen the canyon is the narrow railroad track. Looking ahead, or backward as the train screeches around sharp curves, one may see, towering even above the precipitous cliffs, far higher mountains—some with glaciers on the sides of their needle-like peaks. Mount Eolus, 14,086 feet, dominates the San Juan Range and the canyon, but shares attention with many other mountains of indescribable ruggedness and stupendous beauty. Here there is no feeling of openness, as at the base of Pikes Peak; the topography of San Juan County is so rugged that in the entire county there is not an acre of tillable soil. Everywhere are steep slopes and vertical cliffs; at the bottom of it all, beneath the jumbled mass of peak upon peak, of canyon within canyon, is the bottom of the gorge of the Las Animas, with the little railroad alongside.

Suddenly a small, wider, basin area opens up. A few houses appear, then a mine shaft-house with a pile of tailings perched on the canyon wall, and the train arrives at the end of the line—Silverton.

Not Quite a Ghost Town.

Silverton is almost, but not quite, a ghost town. The demonitization of silver in 1893 caught the town in its prime, and it has never since fully recovered, though there are a number of active mines in the vicinity and the present population is somewhat over 1000. The wide streets, unoccupied houses, and the exposed foundations of others reveal the town's former importance. The hotel, with its Victorian architecture, its mansard roof, and its gaudy embellishment, unmistakably reveals the date of the town's former prosperity. The shop and yard of the Silverton Northern Railroad, which tapped the mines north of town, speak of the past and promise for the future, for the line, though

Semi-weekly mixed train.

Twice weekly the mixed train chuffs across the smooth floor of the cup in the mountains and into Silverton. Sheep ranches make the railroad a necessity to the town, as sheep cannot be trucked satisfactorily. Ore, fuel, and general supplies, however, make up the bulk of the traffic. The valley floor is hardly broad enough for a wye, but the little sportsmodel Mikado turns, switches its train, and is ready to start down the grade again. The bright red caboose often has a railfan or two on the cupola (below). It is some 20 miles below Silverton, where the river has whittled itself down into the rock far below the railroad grade (right), that the scenery is best, but all the line is superb.

All photos by John Maxwell.

inoperative, is still to be seen intact, and the equipment is not beyond rehabilitation.*

The cars from Durango are dropped, others are picked up, the locomotive is watered and wyed, and the southbound train departs for Durango, disappearing into the awesome canyon, not to reappear until half a week later.

Typical trains on the Silverton Branch consist of eight or ten freight cars (including both gondolas and box cars), the combination passenger-baggage car, and a small caboose. The locomotive assigned to the run is usually a little 78-ton Mikado, with drivers inside the frame and with a prominent spark-arrester on the stack, for the area is heavily wooded and inside of the San Juan National Forest, over which the United States Forest Service exercises careful supervision. Large wedge-plows replace the pilots for more than half the year, as the snow accumulates very rapidly in the bottom of the canyon, where the sun seldom reaches. Late in August, snow slides of the previous Winter sometimes remain in the canyon. Near the end of August in 1941 the line was blocked by a snow and rock slide, necessitating the building of a runaround track at the water's edge. Yet the line is rarely out of commission, and even in midwinter the little train makes its run twice each week.

Traffic now consists of coal, gasoline and general supplies northbound, and ore concentrates southbound. The ore is carried in box cars; consequently, each train has several empties: gondolas south and box cars north. The ore receives its primary concentration at the mines, and is then shipped to smelters at Farmington, N. Mex., Leadville, Colo., or Colorado Springs. Thereby the Rio Grande receives from the Silverton Branch long hauls of ore concentrate which add considerably to the revenue of the other portions of its narrow-gauge system, which share in the haul. The war has materially aided the position of this traffic, and there is less likelihood of abandonment of the Silverton Branch than of most other parts of the narrow-gauge system in Colorado.

* Silverton Northern applied in June for permission to abandon its track.

The Circle Trip.

The Silverton Branch could at one time be used as an integral part of the narrow-gauge circle trip. The D&RGW gave an option to the traveler. He could either ride the Rio Grande Southern, avoiding the Silverton country entirely, or he could take a stage from Ouray to Silverton and then ride the branch line down to Durango. Now the narrow-gauge circle is no longer complete, at least as a passenger trip. One can no longer cross Marshall Pass in the luxurious *Shavano*. But the *San Juan Express* does run over Cumbres Pass to Durango, the Rio Grande Southern does run from Durango to Ouray, and from Ouray there are convenient

William Moedinger Jr.

Tight squeeze.

The track manages to squeeze between those mountains ahead. This was taken from the caboose cupola just after the train left Silverton. A little farther along, the river, which also makes the squeeze, has cut a gorge 600 feet below the railroad track. At places the ties come within six inches of the edge of this drop.

John Maxwell.

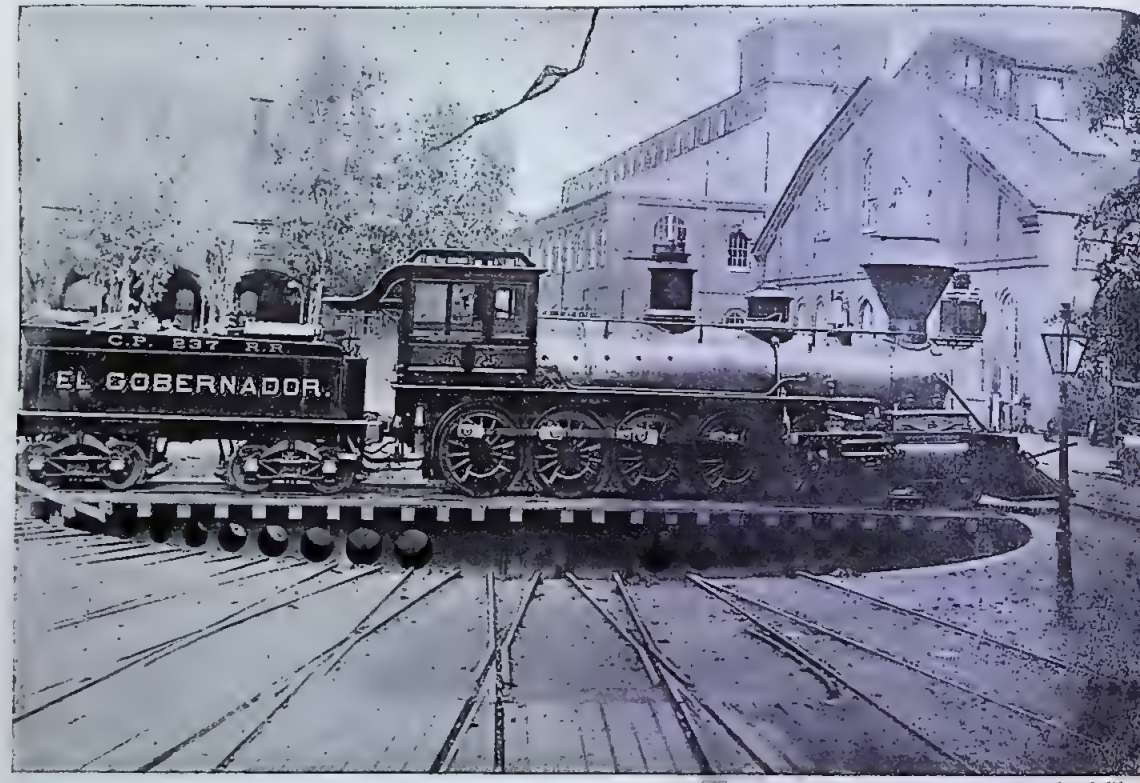
connections to the standard-gauge main line at Grand Junction.

Since the mixed train on the branch runs Tuesdays and Saturdays, one can make the trip without stopover by leaving Denver Sunday or Thursday evening, arriving at Durango at 4:05 p.m. next day, taking the Silverton round trip the third day and also immediately (by advance notice) catching the afternoon Rio Grande Southern train as far as Dolores. The fourth day is for the rest of the Rio Grande Southern and the D&RGW bus to Grand Junction. Then it's back to Denver via either the Royal Gorge or Moffat Tunnel.

Views along the line.

At top is the mixed train at the highway crossing just north of Durango. The open-ended gondolas carry 90-pound rail for track replacement. The bottom photo shows an unusual water supply arrangement. The water comes from melting snow, and the hinged upper end of the flume can simply be dropped into the mountain stream.

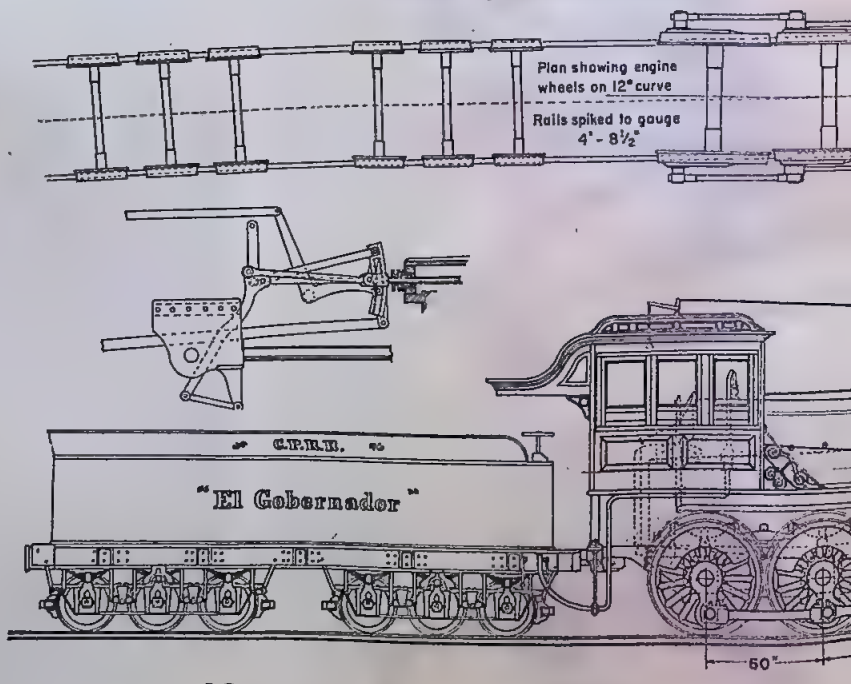
John Maxwell; B. C. Perry, 74 S. Elati St., Denver, Colo.; R. W. Richardson, 34 S. Union St., Akron O.

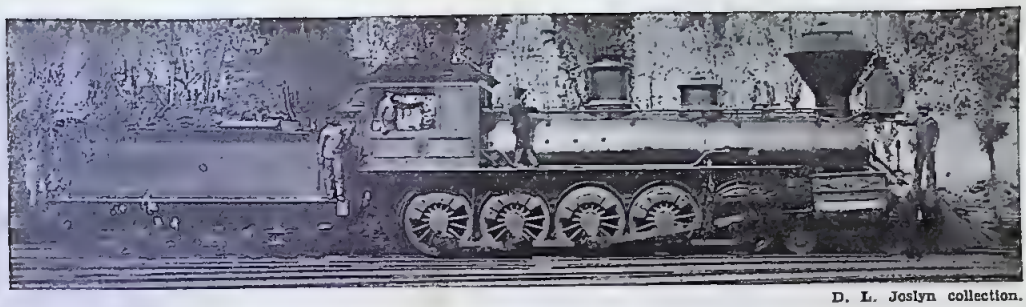


Collection of D. L. Joslyn, 2164 Castro Way, Sacramento, Calif.

The Governor at Sacramento Shops of the Central Pacific, 1883.

Bedecked by eucalyptus trees and quaint gas lamps, the Sacramento Shops of the Central Pacific form a background for the pride of the road, 4-10-0 No. 237, named in honor of Gov. Leland Stanford of California. The eucalypti were supposed to keep the mosquitoes away, but they didn't, and have long since disappeared. The buildings in the background burned in the fire of 1893 and were rebuilt somewhat different, but the old roundhouse still stands and looks about the same, although the doors have long since been removed. Photo on opposite page is *El Gobernador* six years later at Bakersfield, Calif. The plan shows the then-tremendous engine as originally built with six-wheel tender trucks, later replaced with four-wheel trucks as the photos show.





D. L. Joslyn collection.

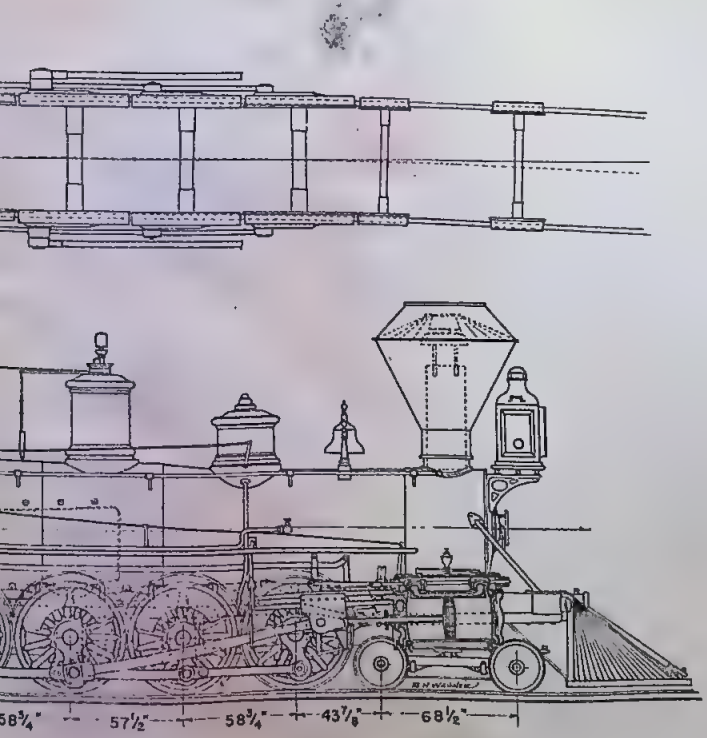
World's Biggest ★ (In 1883.)

THE original motive power of the Central Pacific (now Southern Pacific) was made in the East and went around the Horn by ship before the driving of the golden spike, but it wasn't long before the men of the CP began to feel they could do better and save freight by building their own engines in the Sacramento Shops. George Stoddard was chief draftsman and A. J. Stevens general master mechanic. These two not only built the standard types of power of the period, but struck off for themselves in many an experiment, some successful, some not.

El Gobernador was one of these experiments, an engine which promptly became known throughout the land for its immense size, 65 feet 7 inches in length, and weight, 74 tons. *The Governor* was used on the Sierra grade for some time, but apparently it was too heavy for its day and was finally withdrawn and scrapped.

Among the innovations on the Stevens-Stoddard engines was a new type of valve gear, using two separate valves. This was applied to *The Governor* and is sketched along with the plan. The two valves were individually controlled, one valve stem being hollow and the other running inside the hollow stem. To reverse this rather complicated gear required some type of power reverse, and as this was before the days of compressed air on locomotives Stevens devised a hydraulic gear using water from the lower portion of the boiler and controlled by the valve travel in much the same way as the present pneumatic power reverse gear.

The Stevens valve gear was one step along the way from the old Stephenson gear to the modern Walschaert. The Stephenson gear receives its motion from two opposed cranks mounted on a driving axle, whereas the Stevens gear and the Walschaert take their motion partly from a single crank on a driver axle (on the outside end of the main pin in the case of the usual Walschaert installation) and partly from the crosshead.



The NYO&W

★ **Aggressive management saved road by building new merchandise traffic to replace collapsed hard-coal trade.**

*By A. V. Neusser and C. E. Pearce.**

"I MUST confess I cannot understand why some railroads were built. . . . We will take, for example, the New York, Ontario & Western. This road really starts nowhere, goes nowhere, avoids all large industrial centers, and ends nowhere. When its anthracite mines folded up, the earnings of the road fell off so rapidly that serious financial difficulties soon developed. . . . "

Thus spoke a Wall Street investor at a recent meeting of the New York Division of the Railroad Enthusiasts. Yes, he was speaking of the New York, Ontario & Western Railway —commonly known as the O&W, or "Old & Weary."

"However," continued the speaker, "there is a bright side to its future, and that is its management. If it is humanly possible for the road to be put on its feet again, the trustee and his assistants will accomplish it. They have already offset most of the anthracite loss by building up the so-called bridge traffic, and they are energetically trying to build up the Port of Oswego. . . . "

Therein lies one of the purposes of this article—to introduce to the reader a fascinating line which came very, very near to being sold for junk, but which is now, slowly but surely, taking a new lease on life, due largely to the energy, sincerity and progressiveness of its management.

The O&W bisects the Empire State from Cornwall-on-Hudson to Oswego, on Lake Ontario. Access to a terminal at Weehawken, N. J., across the river from New York City, was gained through a lease contracted in 1886 with the West Shore Railroad, securing the right for 200 years to run trains over that portion of the West Shore extending from Weehawken to Cornwall, a distance of 52 miles, paying only a fixed sum per mile for trackage, and also receiving the right to use the terminal properties on both sides of the river upon reasonable fixed charges for passengers and freight handled.

Gradients and curves are severe and present serious operating problems for tonnage trains. The route, unlike the Erie or the New York Central, does not follow a river valley for hundreds of miles, but takes the hard way across a series of mountain ranges and intervening river valleys that run at right angles to the general direction of the railroad. This necessitated building high trestles, tunnels, and long fills so that, from Middletown to Norwich, the line today represents as varied a piece of railroad construction as can be found east of the Rockies, a fact little known to the general public since no regular through passenger trains have run over it in recent years.

To cross Northfield Mountain, between Sidney and Walton, it was necessary to construct a double switchback, as a tunnel through the mountain was too expensive to consider at the time of construction. Added to this switchback were constant crossings of the branches of the Delaware, Unadilla, Chenango, and Susquehanna rivers. During this work some remarkable curved trestles were constructed which exist today in the form of curved steel bridges. At Sidney Center, now Maywood, one of these trestles forms the larger part of a 180-degree curve, similar to the many loops made famous on the Colorado Midland and other Western roads. The Northfield switchback was eliminated by a tunnel in 1893.

The Southern Division extends from Cornwall to Sidney, a distance of 201 miles, in-

* With acknowledgements, for valued assistance and encouragement, to R. L. Gebhardt, executive assistant to the trustee; Major Otto C. Gruenberg, superintendent of motive power, now on active duty with the U. S. Army; Ivan R. Pease, assistant superintendent of motive power; and Joseph Doctor, of Mackay & Company. The section on motive power was checked by the motive-power department.

cluding the leased section between Weehawken and Cornwall. The Northern Division continues to Oswego, another 125 miles, making a total mainline mileage of 326. Connecting with the main line at Summitville is the original Port Jervis, Monticello & Summitville Railroad, now operated as a branch. From Summitville the branch line extends 14 miles to Valley Junction, where it divides, going 16 miles to Monticello, and 8 miles to Port Jervis to a connection with the main line of the Erie Railroad. The steepest grade on the O&W, incidentally, is that portion of the Monticello Branch extending from Oakland to Hartwood, where the track ascends at the rate of 122.24 feet per mile, approximately 2⅓ per cent.

From Summitville another branch extends in the opposite direction to Kingston, 35 miles away, where there is a connection with the old Ulster & Delaware Railroad, now a part of the New York Central. The Southern Division has one other branch line, extending 17 miles from Walton to Delhi.

Farther west we find the Utica Division leaving the main line at Randallsville and extending 31 miles to Utica to connections with the Lackawanna and New York Central. The Rome Branch of the Utica Division extends 13 miles from Rome Branch Junction to Rome. The New Berlin Branch, extending 29 miles to Edmeston, was recently sold to the little Unadilla Valley, which gained nation-wide fame a few years ago through a *Fortune* magazine story on short lines.

The Scranton Division extends from the main line at Cadosia to the Jersey Central connection in Scranton, a distance of 54 miles.

The Southern Division is double-tracked from Cornwall to East Branch, and single-tracked from there to Sidney. The only other double-track territory is the Scranton Division. Block signals protect the main line and Scranton Division, while centralized traffic control is in use over the eight miles between East Branch and Cadosio, and through the Fallsburgh and Bloomingburg tunnels.

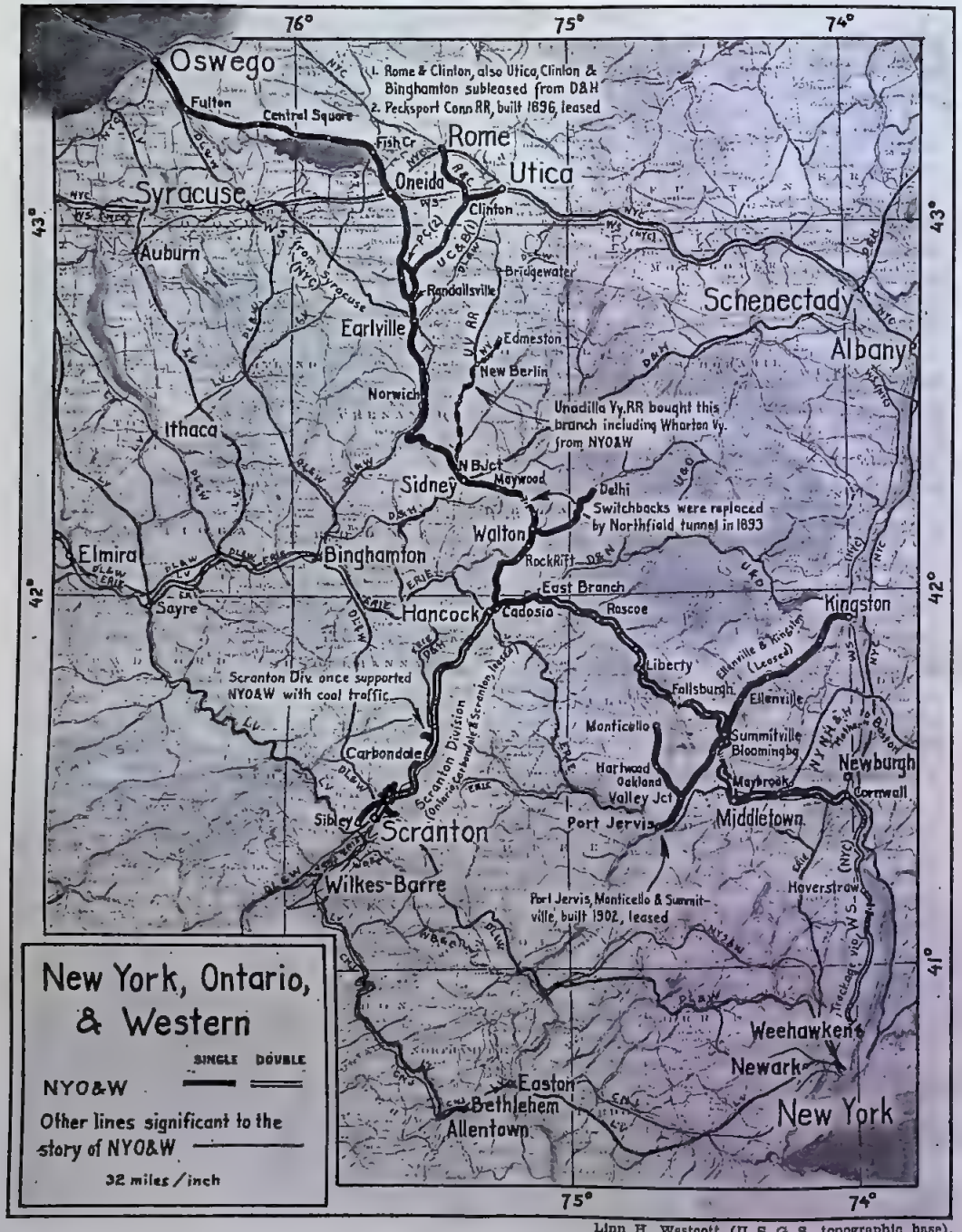
Freight Traffic.

When the bottom fell out of the anthracite market, revenues declined until finally, in 1937, Frederick E. Lyford was appointed trustee, and the O&W's future looked black, indeed. But, in one of his early statements,

Leaving Weehawken terminal.

Train 27 leaving the West Shore terminal at Weehawken one Summer morning. The portal of the West Shore tunnel under Weehawken is barely visible just to the right of the locomotive.

A. V. Neusser, 4021 61st St., Woodside, N. Y.



Linn H. Westcott (U. S. G. S. topographic base).

Through some of the East's finest scenery.

The NYO&W connects the Atlantic Ocean at New York with Lake Ontario at Oswego, a connection of considerable potential importance. The aggressive management of the NYO&W is working to develop the Port of Oswego, and to form a car-ferry link across the lake to Canada. Crossing this current of traffic is the heavy bridge traffic carried from western connections at Scranton to the New Haven (which controls NYO&W stock) at Maybrook. Because the NYO&W crosses the principal mountain ridges at right angles, the construction is spectacular and perhaps the most varied east of the Rockies. On the opposite page is an NYO&W train on West Shore track at Dumont, N. J.

Mr. Lyford said, "The O&W may no longer depend on the revival of coal transportation as a major source of revenue. Instead, it must face transformation from an anthracite to a merchandise-carrying road." With this remark, he heralded the rebirth of the "Old & Weary."

Actually, the main line of the Ontario & Western is now that portion of the road originating with the Lehigh Valley and Lackawanna connections near Scranton, Pa., and proceeding to a connection with the New York, New Haven & Hartford [which, incidentally, has stock control over the O&W] at Maybrook, N. Y., via Cadosia, Middletown and Campbell Hall. Over this route moves Western beef, California and Texas fruit and vegetables, and other commodities originating in the Middle and Far West and moving via O&W to New Haven connections for New England delivery.

Two fast symbol freights run in this service, covering the 135 miles from Mayfield Yard (near Scranton) to Maybrook in about 5¼ hours, thus maintaining an average speed of 25¾ miles per hour. Pusher engines are used on the Scranton Division and out of Livingston Manor and Summitville on the Southern Division in order to maintain this schedule.

Train No. OB-2 leaves Mayfield Yard, Pa., at 9:50 p. m., arrives in Maybrook at 3:15 a. m. Here the NYNH&H takes over, arriving in Boston at 8 p. m. Train No. LB-4 leaves Mayfield Yard at 8 a. m., arrives in Maybrook at 1:15 p. m. and at Boston at 3 a. m. the next day.

Another heavy movement from the Scranton gateway is to Norwich and Utica for western New York points. The principal train in this service is SU-1. Of course, these trains have their counterparts running in the opposite directions—US-2, BL-1 and BO-1.

But what about the Northern Division? This line is unusual in one respect: An almost equal amount of traffic flows in each direction, thus eliminating unprofitable empty hauls. But the big difficulty is that the volume of traffic is exceedingly small. The management has been and is now engaged in the promotion of an ambitious project which, if successful, will put an end to any doubts one may have regarding a profitable future for the line.

Some $300,000 has been expended in building up dock, storage, and terminal facilities at the Lake Ontario port of Oswego. Negotiations have been progressing with the Canadian Pacific and Canadian National railways with the view of establishing a car ferry con-

Frank Quin, New York Division, Railroad Enthusiasts.

J. M. Laury collection.

Fifty years ago.

Back in the early 1890's Camelback engines were common on most hard-coal roads. The NYO&W 2-8-0 was photographed at Sidney about 1892, steam brakes, link-and-pin couplers and all. The 4-4-0 was one of several in deluxe through passenger service; the photo was taken at Cadosia about 1892. The general view is of the Sidney yards in 1892 with passenger train pulled by a Rome 4-4-0. D&H mainline tracks are beyond the station.

necting Oswego with a port on the northern side of the lake. It is hoped that a differential route will be set up, traffic moving by water to Cornwall-on-Hudson, O&W to Oswego, thence car ferry and rail west, instead of the present route, water from New York to New London, Conn., rail north and then west. It is planned to rebuild the existing coal docks at Cornwall to handle this business.

A new outlet to the Great Lakes will then be provided, and for the first time in its history the "Old & Weary" may confidently urge industry to settle on its railroad. Quite an accomplishment for a railroad to cut its teeth after nearly 60 years of operation and put those teeth into a plan to offset the lack of foresight of its builders!

The officials are so optimistic about the new development that they have already investigated the matter of new motive power to handle the expected increase in freight traffic. It is with great sorrow, for they are strongly partial to steam, that the writers have found the management to be greatly impressed by the virtues of the Diesel locomotive.

Passenger Traffic.

PASSENGER facilities during the Winter months are limited to one daily passenger train each way between Weehawken and Walton, a distance of 180 miles. The usual consist of this train on weekdays is a Ten-Wheeler, a combination mail and express car, and a day coach—quite a comedown for a line which, not so many years ago, ran through trains to Chicago! From a perusal of old *Official Guides*, one learns that the O&W was "the only line running luxurious reclining-chair cars between New York and Chicago." These trains also carried "Pullman buffet sleeping cars" and "elegant day coaches." They operated via O&W to Oswego, thence Rome, Watertown & Ogdensburg to Suspension Bridge, and Wabash Railway to Chicago.

Present traffic is of a highly seasonal nature, as the line serves a popular resort territory. During the Summer, the service expands to three trains a day, with additional trains on weekends. The usual limit of the Summer travel is Roscoe, 135 miles from Weehawken. A serious difficulty exists in that it would be highly uneconomical to spend any considerable amount of money on passenger equipment which is used for only about two months out of every year. Hence,

the preponderance of O&W passenger cars are still of wood construction, including a number of parlor cars complete with high-backed swivel chairs, elaborate woodwork, and brass cuspidors!

In the Summer of 1938, the railroad entered the streamlined-train field by reconditioning a locomotive, several coaches, and its two steel parlor-observation cars. Otto Kuhler was consulted and he developed a color combination of maroon and orange, with which the entire train was painted. The interiors of the cars were freshened by light-colored paints and slip covers on the seats. Movable maple chairs, attractively upholstered, were substituted for the old-fashioned revolving chairs in the parlor cars. The locomotive was "speedlined" by a metal covering over the running boards and a flat sheet between the pilot braces. Chromium plating was used liberally on the engine and cars, and the general effect was very pleasing. The many favorable comments the reconditioned *Mountaineer Limited* brought forth from patrons, and the good will it established, were all out of proportion to the small expenditure it entailed and yet, due to one of those inexplicable mysteries of the railroad world known as "operating reasons," the modernization program has been carried no further. Perhaps maroon paint is more expensive than green!

During the vacation season nearly 150,000 passengers are transported an average distance of 100 miles. On some days equipment for as many as 11,000 passengers is provided. This is one of the reasons why the O&W is such a fascinating road from a railfan's viewpoint. The peak movements are during the July 4 and Labor Day weekends. On these occasions all the old wooden, gas-lighted, hump-backed coaches that can turn a wheel are pressed into service. Seeing one of these ancient trains, hauled by a Camelback gasping up the steep grades of Sullivan County, gives us younger members of the railfan brotherhood an inkling of railroading as it was in grandpa's day.

If the reader will permit, we shall digress for a moment with a suggestion to those who are addicted to watching trains go by (and who isn't?). If you're tired of seeing train after train of sleek Pullmans clicking past, go to Middletown, N. Y., on Labor Day afternoon. Choose a comfortable seat on a baggage truck at the old Main Street station, now used as an office by the little Middletown & Unionville Railroad. About 3 in the after-

Wintertime meet.

The local passenger train on the north end meets an extra freight, bound for the Rome Branch, at Randallsville. This passenger run makes a round trip south from Oneida, on the NYC, to Sydney.

R. O. Hardy, 201 Crippan Ave., Syracuse, N. Y.

noon the big parade will begin. There'll be several classes of Moguls, Ten-Wheelers and Mountain types hauling an indiscriminate assortment of O&W coaches and parlor cars (both wooden and steel), New York Central coaches, wooden Delaware & Hudson coaches, and open-platform, steel suburban coaches lettered "Lackawanna." Sometimes there are as many as eight or nine sections of a single train, one right after another. There being no dining cars on the O&W, the station at Middletown is fitted with a gigantic lunchroom equipped to feed people a trainload at a time. It is an amazing experience to stand on the Middletown station platform as one of these trains pulls in and watch a veritable phalanx of humanity stream from the coaches to the lunch counters in a matter of seconds. Just another of the O&W features which smacks of railroading of another era.

When there's a lull in trains (we're back at Main Street), simply turn your head in the other direction and there, rolling by the other side of the depot, will be the *Erie Limited* or one of the many trains from the Erie's Delaware River resorts. For sheer variety and action it's a show you can't afford to miss!

Motive Power.

As is the case with the great majority of the nation's railroads, the newest of the O&W road engines is more than 10 years old. Most recent of the road's motive power are the Y-2 class Mountain-type locomotives, of which 10 were built in 1929 by Alco. They are the heaviest locomotives on the road, with a weight in running order of 119½ tons on the drivers, 30½ tons on the front truck and 29½ tons on the trailer truck, making a total of 179½ tons. These engines have a tractive effort of 71,850 pounds, with a factor of adhesion on the drivers of 3.95. All 10 are equipped with Franklin trailer boosters. The driving wheels are 69 inches in diameter and the cylinders are 27" x 30".

The Y-2's are basically very similar to the New York Central's L-2, or Mohawk type. They are the most powerful and modern engines on the road, and are depended upon to handle the heavy Scranton-Maybrook symbol freights. Recently, the West Shore completed an extensive right-of-way rehabilitation and improvement program with the object of making it possible for the Central's Mohawks to operate over the line, with the result that the O&W's Class Y-2 engines may occasionally be seen hauling a freight down to Weehawken. On very special occasions, such as heavy Labor Day travel, one may even be lucky enough to see a Y-2 arriving in Weehawken at the head end of a passenger train.

Probably the most versatile O&W locomo-

Heaviest power on the road.

An engine of the Y-2 class, newest NYO&W power, takes coal at Cadosia, N. Y., junction point of the main line and the heavily trafficked Scranton Branch. Notice the Winter snowplow pilot.

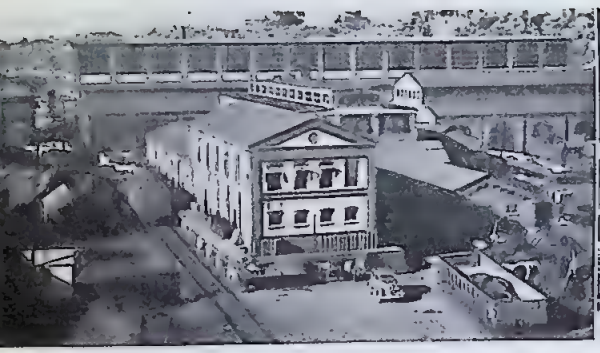
tives are the Class Y, 4-8-2, built at Schenectady in 1922-23. These light Mountain-type engines are equally efficient hauling fast merchandise or heavy passenger trains. They also do yeoman duty on coal drags and in helper service. This class of locomotive has a total weight in running order of 158 tons, produces a tractive effort of 50,300 pounds, with a factor of adhesion of 4.16. Engine 405 of this series was chosen to grace the front of the speedlined *Mountaineer*.

Similar to the Y class is the Y-1 class, in which there is but one locomotive, No. 402. It differs from the Y class in that the engine is equipped with a Franklin trailer booster, which increases the total weight to 162½ tons and increases the tractive effort to 60,000 pounds. Incidentally, the fact that this engine is equipped with foot boards rather than a road pilot testifies that she is ordinarily used only in freight and helper service.

There are 11 locomotives of the 2-10-2 type (No. 357 was recently scrapped). These were built by Schenectady in 1915 and each has a total weight of 176 tons. They are used largely on the Scranton Division, occasionally serving as pushers on the main line at Livingston Manor or Summitville. It is a common thing for three of these engines to be coupled to a Scranton Division train, and as they blast their way up the grades the effect

(Turn to page 30.)

Charles E. Pearce, 25-26 18th St., Long Island City, N. Y.



New York, Ontario & Western.

At Middletown, N. Y., the NYO&W maintains its principal locomotive and car repair shops. All major repairs are made here. Light repairs are made at two other points.

Inside the 25-stall roundhouse at Middletown. No. 407 is one of the Class Y Mountain types.

General view of the Middletown roundhouse with its 90-foot turntable and two drop-pits (part of stalls, so wheels can be dropped).

The slow, hefty Santa-Fe-type locomotives of Class X are used as pushers on heavy grades, especially on the Scranton Branch, where pusher service helps maintain a fast freight schedule.

Engine 401 with a southbound coal extra near Ferndale, on the most heavily used section of the main line.

A. V. Neusser.

R. O. Hardy.

The NYO&W's 46 Camelbacks (some of the other hard-coal roads call this type of engine a Mother Hubbard) were all built in 1911 or earlier and are of the smaller types, like squat little Consolidation No. 217, below.

The 246 is a more modern looking piece of power than her 38 years would indicate. The newer details, such as the Baker valve gear, are probably accounted for by the fact that she was rebuilt in World War years from an original 2-6-0. The Ten-Wheelers are used plenty in the Summer passenger rush.

Charles E. Pearce.

Charles E. Pearce.

A. V. Neusser.

A. V. Neusser.

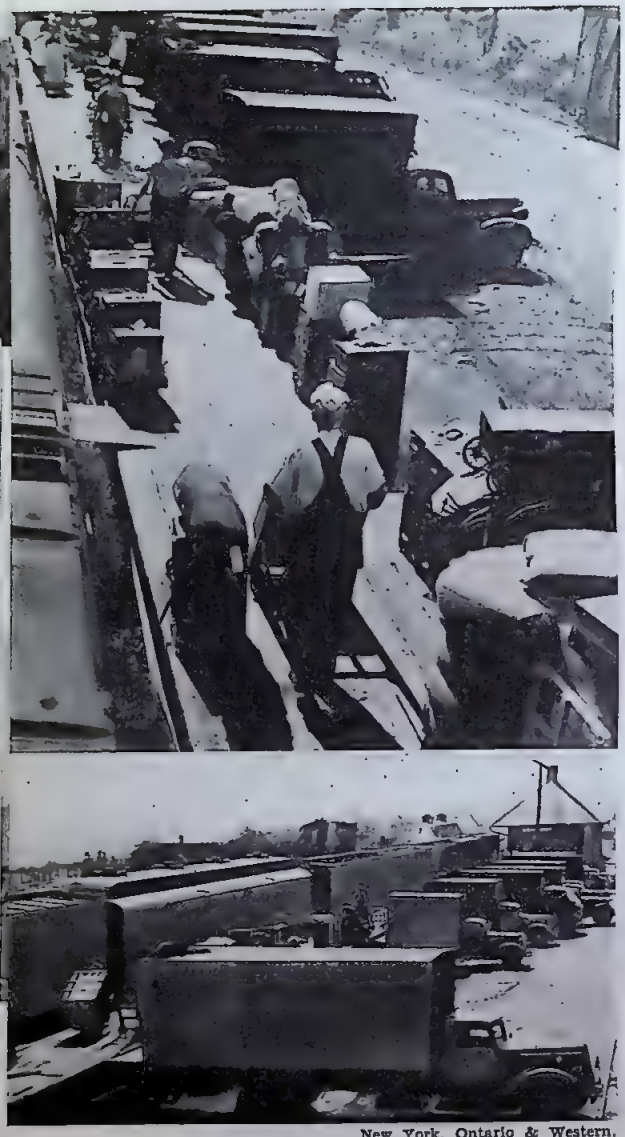
Locomotives of the New York, Ontario & Western.

The 405 (above) is just a standard Class Y 4-8-2, built at Schenectady in 1923, but as streamstyled for the *Mountaineer* she is a good example of what can be accomplished with judicious use of a little sheet metal and colored paint. Passenger travel on the Southern Division during Winter months is limited to one daily train in each direction, and this usually consists of a Ten-Wheeler, combination mail-express-baggage car, and a day coach as shown above climbing the 1½ per cent grade between Cornwall and Meadowbrook. The detailed listing of active NYO&W locomotives follows:

Class	Numbers	Type	Driver Diam.	Cylinders, D. and S.	Tractive Effort, Pounds	Weight, Tons	Builder	Date	Total Number of Locos.	
E	225-228	4-6-0	69″	21″ x 26″	27,300	90½	Alco (Brooks)	1911	4	
I	42	2-6-0	63″	21″ x 26″	29,400	85	Baldwin	1907	1	
I-1	33, 35	4-6-0	63″	21″ x 26″	29,400	96	Alco (Cooke)	1904	2	Originally built as 2-6-0's and converted to 4-6-0's in 1919 and 1920.
L	50-52	0-6-0C	51″	21″ x 26″	34,400	80½	Alco (Cooke)	1910	7	
L	53-56	0-6-0C	51″	21″ x 26″	34,400	80½	Alco (Cooke)	1911		
P	201-204	2-8-0C	55″	22″ x 32″	44,300	101	Cooke	1900	18	
P	205	2-8-0C	55″	22″ x 32″	44,300	101	Cooke	1901		
P	207-211	2-8-0C	55″	22″ x 32″	44,300	101	Cooke	1901		
P	213, 214	2-8-0C	55″	22″ x 32″	44,300	101	Cooke	1901		
P	215, 217	2-8-0C	55″	22″ x 32″	44,300	101	Alco (Cooke)	1902		
P	218-220	2-8-0C	55″	22″ x 32″	44,300	101	Alco (Cooke)	1903		
U	254, 255	2-6-0C	69″	21″ x 28″	28,900	81½	Alco (Cooke)	1907	2	
U-1	244-246	4-6-0C	69″	21″ x 28″	30,400	92	Alco (Cooke)	1904	7	Originally built as 2-6-0's and converted to 4-6-0's in 1916, 1917, 1919, 1923 and 1924.
U-1	250	4-6-0C	69″	21″ x 28″	30,400	92	Alco (Cooke)	1905		
U-1	251, 253, 256	4-6-0C	69″	21″ x 28″	30,400	92	Alco (Cooke)	1907		
V	271-275	2-6-0C	63″	21″ x 28″	31,700	87	Alco (Cooke)	1908	12	
V	277-280	2-6-0C	63″	21″ x 28″	31,700	87	Alco (Cooke)	1908		
V	281, 282, 284	2-6-0C	63″	21″ x 28″	31,700	87	Alco (Cooke)	1909		
W	301-314	2-8-0	58″	22″ x 32″	43,100	104	Alco (Cooke)	1910	26	No. 355 was once equipped with a Bethlehem auxiliary engine and designated as Class X-1. It had a tractive force of 84,500 pounds with booster.
W	315-326	2-8-0	58″	22″ x 32″	43,100	104	Alco (Cooke)	1911		
X	351-356	2-10-2	57″	28″ x 32″	71,100	176	Alco (Schen)	1915	11	
X	358-362	2-10-2	57″	28″ x 32″	71,100	176	Alco (Schen)	1915		
Y	401, 403, 404	4-8-2	69″	27″ x 28″	50,300	158	Alco (Schen)	1922	9	
Y	405-410	4-8-2	69″	27″ x 28″	50,300	158	Alco (Schen)	1923		
Y-1	402	4-8-2	69″	27″ x 29″	60,600	162½	Alco (Schen)	1922	1	Tractive effort indicated includes booster.
Y-2	451-460	4-8-2	69″	27″ x 30″	71,850	179½	Alco (Schen)	1929	10	
D	101-104	B-B	33″	---------	26,400	44	G. E.	1942	4	Class D is powered by two 190-horsepower Caterpillar engines.

Letter C indicates Camelback.

Total number of locomotives on active service roster----------114



New York, Ontario & Western.

Trucks work with railroad.

The NYO&W was one of the pioneers in the coordination of railroad and truck service, using each in its own special sphere of usefulness. On May 2, 1932, the road inaugurated truck service out of Liberty, N. Y., serving all local stations on main line and branches between Middletown and Cadosia. In November, 1934, pickup and delivery service was started at all points in the NYO&W territory. The transfer platform shown on this page is at Liberty, N. Y. A fleet of 11 trucks picks up all l. c. l. freight in the Middletown-Cadosia territory, bring it to this one break-bulk point for carloading, and similarly deliver less-than-carload freight from cars unloaded at Liberty.

is quite as spectacular as the Pennsy's handling of westbound freights over the Alleghenies.

The Class X, Y, and Y-2 engines are not permitted to operate north of Northfield and ordinarily do not run north of Cadosia on the main line.

The most locomotives in any one class are the 26 Class W engines, which are Consolidations built by the Cooke Works in 1910-11. They have 58-inch drivers, 22″ x 32″ cylinders, total weight of 104 tons, and a tractive effort of 43,100 pounds. These maids-of-all-work handle the bulk of the freight business north of Cadosia. They are also used on the lighter trains over other portions of the main line. In addition to this they work in pusher and yard service as well as handling the Delhi and Kingston branch runs.

The Class E, U and V engines alternate between passenger and branch-line service. Class E is the regularly assigned power for the Winter passenger service, except Sundays and holidays, at which times a 4-8-2 takes over. Class V assists Class W with the Northern Division freight when extra power is needed.

Class I—of which No. 42 is the last Baldwin engine on the road—and Class I-1 are used in local service on various portions of the Northern and Utica divisions.

The Class P is the oldest of the locomotives in operation. These 2-8-0's were built by Cooke in 1900-03. They are used only in Scranton Division way freight and switching service.

The Class L, 0-6-0 Camelback switchers, have been supplemented by four Alco-G. E. 44-ton Diesel switchers, purchased for service at Oswego, Fulton, Sidney, and Walton. The Camelbacks would probably have been retired upon arrival of the Diesels were it not for the great increase in traffic brought on by wartime freight.

SUCH is the "Old & Weary." The writers have presented only a sketchy picture,* but if they have provided the inspiration that will result in a few more railfans becoming interested in "the best Western road in the East," they feel well compensated for their efforts.

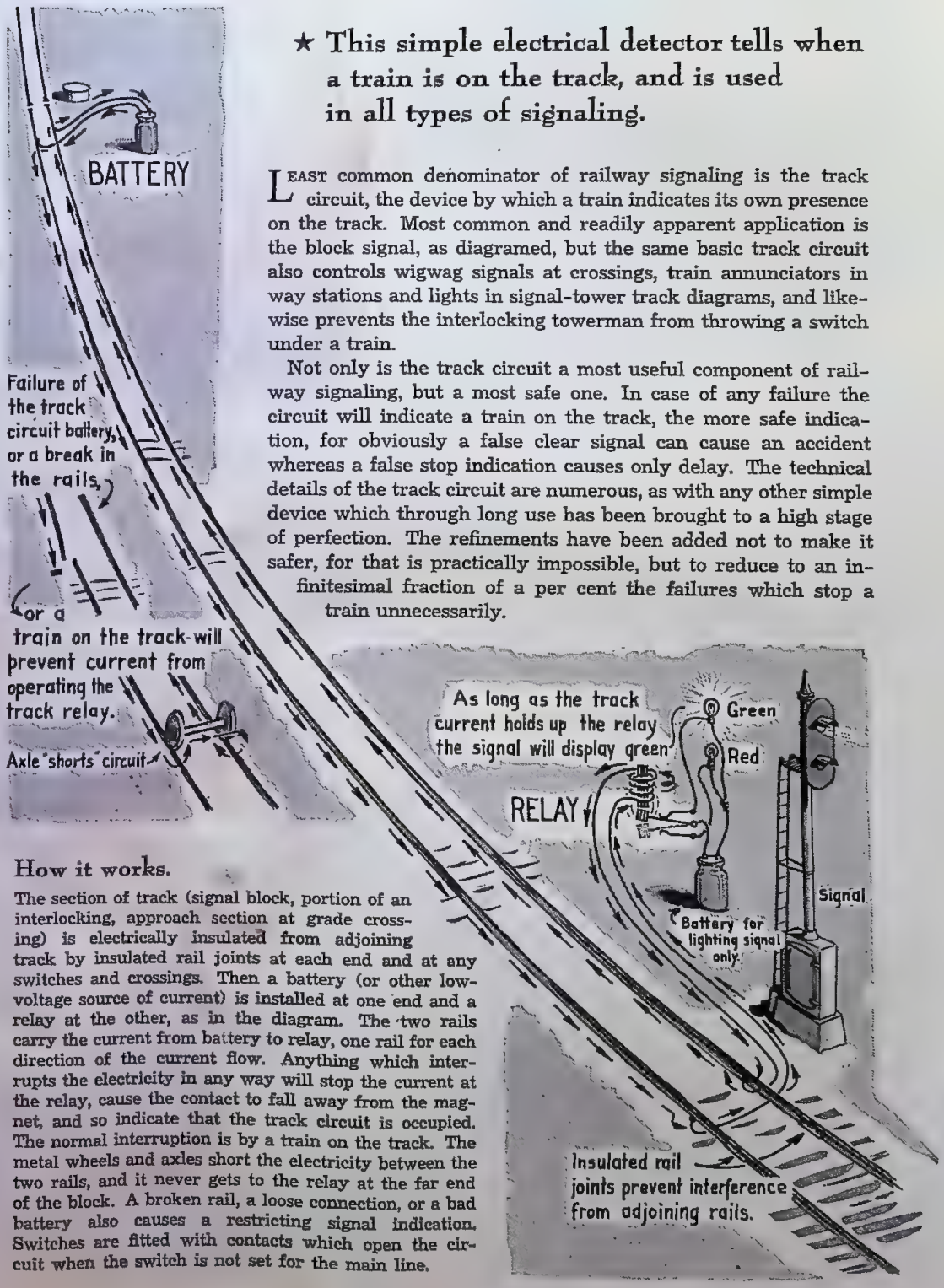
* A good history of the New York, Ontario & Western was presented in Bulletin 40, May 1936, of the Railway & Locomotive Historical Society.

The Track Circuit

★ This simple electrical detector tells when a train is on the track, and is used in all types of signaling.

LEAST common denominator of railway signaling is the track circuit, the device by which a train indicates its own presence on the track. Most common and readily apparent application is the block signal, as diagramed, but the same basic track circuit also controls wigwag signals at crossings, train annunciators in way stations and lights in signal-tower track diagrams, and likewise prevents the interlocking towerman from throwing a switch under a train.

Not only is the track circuit a most useful component of railway signaling, but a most safe one. In case of any failure the circuit will indicate a train on the track, the more safe indication, for obviously a false clear signal can cause an accident whereas a false stop indication causes only delay. The technical details of the track circuit are numerous, as with any other simple device which through long use has been brought to a high stage of perfection. The refinements have been added not to make it safer, for that is practically impossible, but to reduce to an infinitesimal fraction of a per cent the failures which stop a train unnecessarily.


BATTERY
Failure of the track circuit battery, or a break in the rails,
or a train on the track will prevent current from operating the track relay.
Axle shorts circuit
As long as the track current holds up the relay the signal will display green
Green
Red
RELAY
Signal
Battery for lighting signal only
Insulated rail joints prevent interference from adjoining rails.

How it works.

The section of track (signal block, portion of an interlocking, approach section at grade crossing) is electrically insulated from adjoining track by insulated rail joints at each end and at any switches and crossings. Then a battery (or other low-voltage source of current) is installed at one end and a relay at the other, as in the diagram. The two rails carry the current from battery to relay, one rail for each direction of the current flow. Anything which interrupts the electricity in any way will stop the current at the relay, cause the contact to fall away from the magnet, and so indicate that the track circuit is occupied. The normal interruption is by a train on the track. The metal wheels and axles short the electricity between the two rails, and it never gets to the relay at the far end of the block. A broken rail, a loose connection, or a bad battery also causes a restricting signal indication. Switches are fitted with contacts which open the circuit when the switch is not set for the main line.

Richard E. Prince, 1141 Larchmont Crescent, Norfolk, Va.

Below the Mason & Dixon Line

★ **Multiplicity of medium-sized lines adds interest to railroads of the South.**

It's only in the South that one can find not only major railroad systems, such as the Southern and the Atlantic Coast Line systems, and short lines like the 25-mile Tennessee & North Carolina, but dozens of medium-sized roads small enough to be within a single state or two and yet large enough to sport modern locomotives and trains like the Atlanta, Birmingham & Coast's Mountain type shown with train No. 1 at the top of the page. The full-page picture shows some of the scenery and mainline action which is as

L&N Pacific.

Typical of Louisville & Nashville passenger power is Pacific No. 218. L&N hallmark is engine number painted on headlight glass.

Richard E. Prince.

Frank Clodfelter, Asheville, N. C.

A. C. Kalmbach.

abundant south of the Mason and Dixon line as anywhere else in these United States. It is a Southern freight in the Blue Ridge Mountains of western North Carolina. The South is not as familiar to travelers as other parts of the country, but will richly reward those who ride through it with eyes open and with numerous stopovers.

New York-bound from Montgomery.

East from the Montgomery (Ala.) Union Station works this hefty Western of Alabama 4-8-2 with the *Crescent Limited* for New York. The train runs from New Orleans over L&N to Montgomery, over the Western of Alabama and the Atlanta & West Point (the West Point Route) to Atlanta, over the Southern to Washington, and over the Pennsylvania to New York.

A&WP Ten-Wheeler.

Fitted appropriately enough with Southern valve gear is this Ten-Wheeler (No. 228) of the Atlanta & West Point, 87-mile road operated in close connection with the 138-mile Western of Alabama and the 317-mile Georgia Railroad.

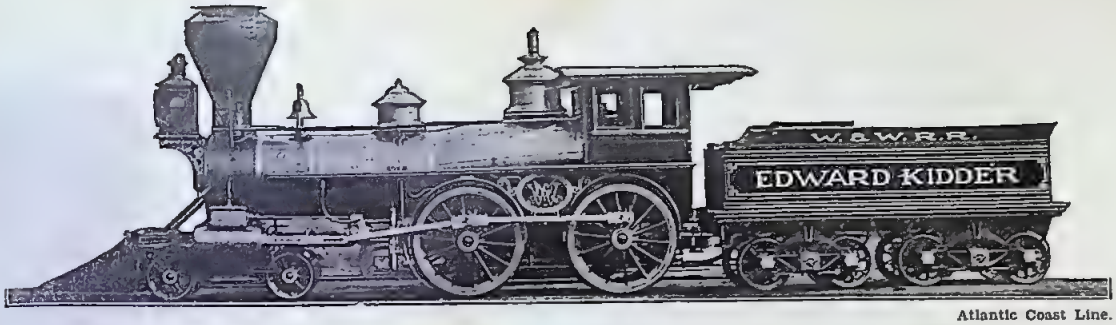
Richard E. Prince.

NS Berkshire.

For a locomotive of her size she's plenty big. Norfolk Southern No. 600 is one of five 2-8-4's purchased in 1940 and is of especial value in pulling the fast extra freights which move the vast North Carolina potato crop.

Her name is [illegible]

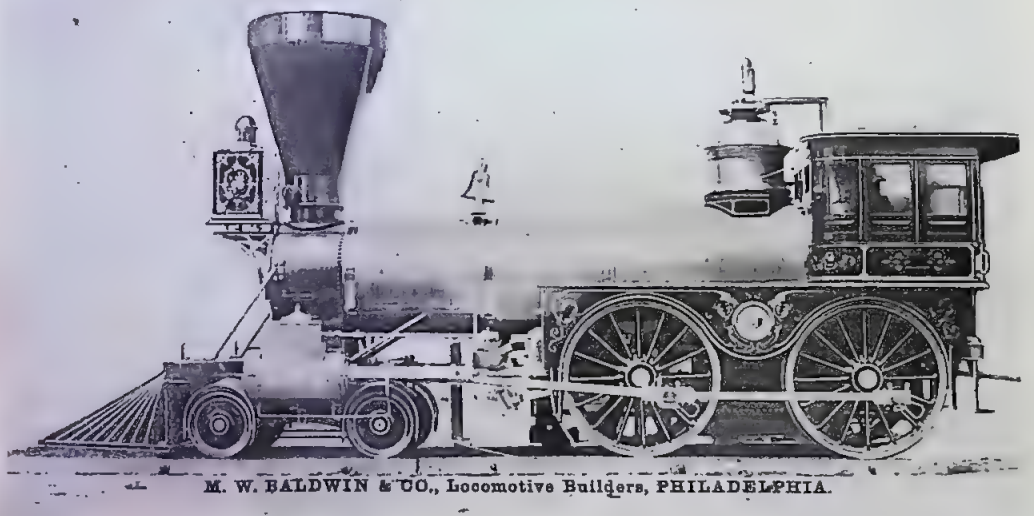
Why anyone would want to name a locomotive *Maud* is more than we know, but look [illegible] plate on the headlight. This So[illegible] four-coupled tank loco. 1509, does switching at



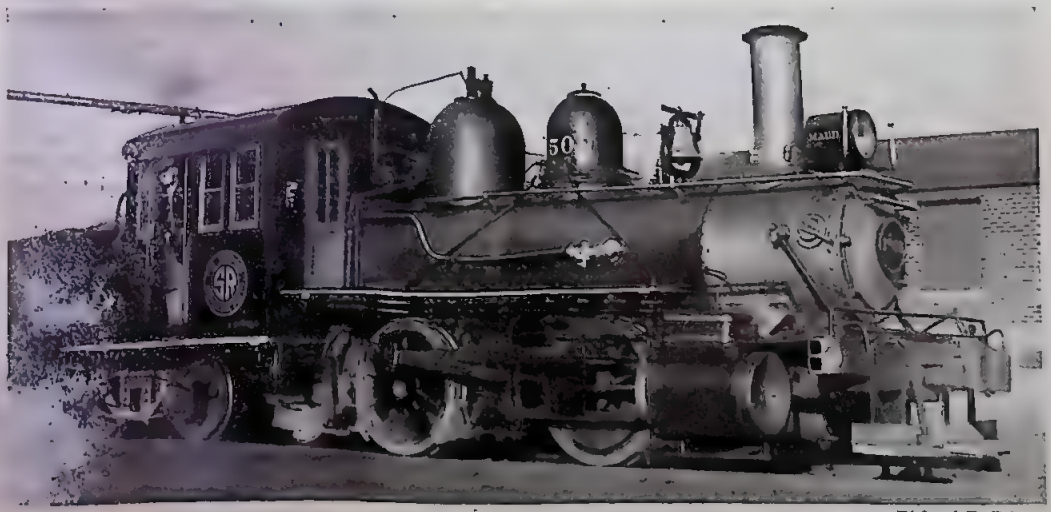
Atlantic Coast Line.

Old-timers of the Atlantic Coast Line.

William Mason turned out the *Edward Kidder*, with its plain, classic New England lines, at Taunton, Mass., in 1866. The 32-ton American Standard was sold to the Wilmington & Weldon Railroad, now part of the Atlantic Coast Line. The old Baldwin builder's photo is also of a Wilmington & Weldon locomotive, in service about 1859. The ACL was originally organized in 1836 as the Richmond & Peterson Railroad and the present name was adopted in 1900. The ACL itself operates 5104 miles, and controls or leases some 23 other railroads, most of which are operated separately but are considered as part of the ACL system. These include the AB&C, L&N, Clinchfield, NC&StL, and many smaller properties.



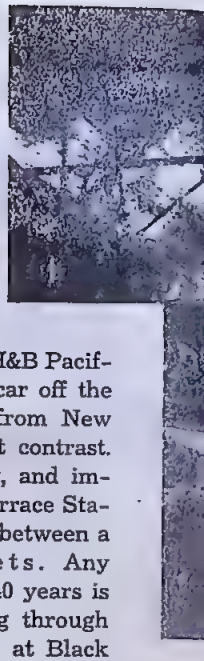
Atlantic Coast Line.



Richard E. Prince.

Bill Moore's Trip

★ A first-class railroad vacation trip; across Canada on Canadian Pacific is the first lap.



By William C. Moore.

THE luxurious all-coach streamliners of recent years have all but obscured the fact that first-class railroad is still the most comfortable method of travel, and that Pullman cars offer a Summer vacation trip that is real vacation. True, coach travel has been radically changed for the better in the last decade, but Pullman accommodations have been steadily improving right along. Let me tell you about our trip. The route was primarily on three systems: Canadian Pacific, Southern Pacific, and Union Pacific. All three have had much experience in dealing with the vacationing public, and all three do a superior job.

The first lap was from Buffalo to Vancouver, by Canadian Pacific through the Canadian Rockies. Then came a sidetrip to Alaska, including the White Pass & Yukon. Southern Pacific took us down the coast to Los Angeles, Union Pacific to Chicago, and Michigan Central back to Buffalo.

Buffalo is a grand railroad city, second only to Chicago in lines in and out, and in the directions one can travel. The Central Station, now 11 years old, is modern in layout and well designed to handle the flow of traffic from four tracks eastward, dividing it into Lake Shore or Michigan Central routes to or from the West. Hudsons come and go in great profusion, with a few time-honored Pacifics for the lighter jobs. For variety, a Pennsy Pacific up from its native state via Olean, and, best of all, the clean, conservative Pacifics of the CPR and the Toronto, Hamilton & Buffalo, pop in and out several times each day. The maroon coaches of the TH&B are unique in that all of them are lettered in the center, below the windows, with the full names of the owning roads: "Canadian Pacific; Toronto, Hamilton & Buffalo; and Michigan Central."

We left on train No. 75 behind TH&B Pacific No. 17, in a compartment of a car off the *Iroquois*, NYC train No. 59 up from New York. In Buffalo there is a great contrast. The Central Station is large, new, and impressive. The next stop, the old Terrace Station, is small, old, and squeezed in between a double-track line and city streets. Any change in this station in the past 40 years is purely coincidental. After winding through northwest Buffalo, a stop is made at Black Rock for customs and immigration officers of Canada, and then the single-track bridge over the Niagara River is crossed at a snail's pace. At either end, particularly the American side, are extensive freight yards with many loaded cars waiting to cross or waiting after the international jump. New York Central, Erie, Lehigh Valley, and Lackawanna are on one side, Canadian National, Wabash, Pere Marquette, and, most important of all, the Michigan Central—TH&B link—on the other.

That Canada is at war is immediately apparent. Guards with rifles are at every bridge and vital point; soldiers with fixed bayonets stand at such crossings as the Welland Canal. Posted notices ban photographing any designated "prohibited areas," but away from these there are no camera restrictions. Pictures of station scenes, trains, and passenger engines on regular trains can be made without violating regulations. Engine terminals, harbors, docks, and vital bridges are taboo. American visitors are welcome, and Canadian officials go out of their way to be courteous and cordial.

The swing around the west end of Lake Ontario is pleasant. After a stop at the new station at Hamilton the train heads eastward to Toronto on the main Montreal-Detroit line of the CPR. Long freights highball in both directions, and industrial sidings are filled with cars. The classification yards at Toronto

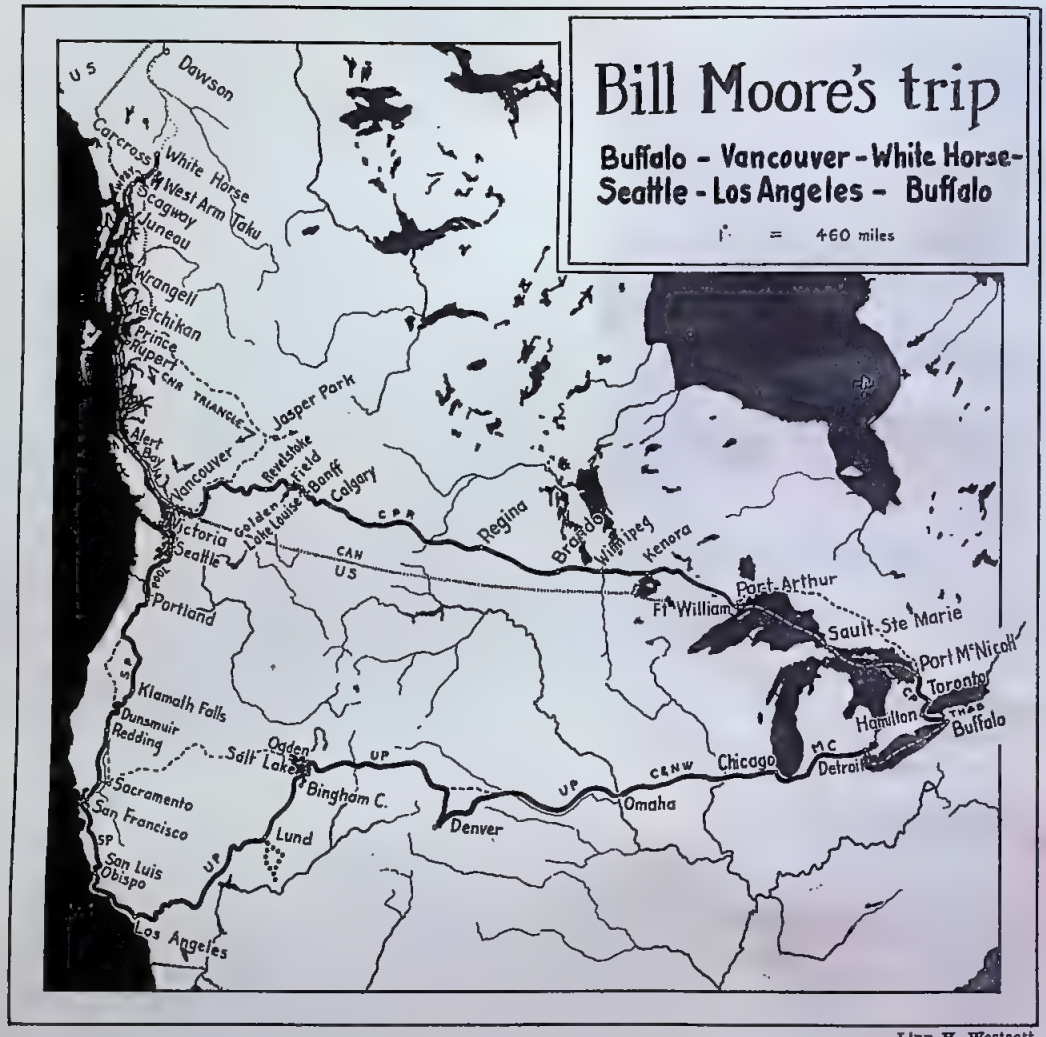
Photographic illustrations by the author, from Railroad Photographic Club, 47 Royal St., Allston, Mass.

Canadian Pacific Hudson 2843 takes a drink while at the station at Brandon, Man. It is pulling the *Mountaineer* for Chicago, and at right is the west-bound *Dominion*. The cleanly styled CP power is, like the cars, a polished deep red. Division-point station stops are interesting breaks in the trip.

reach out far to the west of that city. The passenger tracks fan out impressively into the grand terminal along the lake front. The immense station is directly connected to the Royal York Hotel, CPR-owned and operated, the largest in the British Empire.

After luncheon there, the first of many pleasant CPR surprises presented itself. The timetable listed a 2:10 p.m. *Steamship Special*. This train proved to be magnificently appointed: five of the latest coaches (several lightweight), a lounge, parlor cars, and an observation named for far-off Trinidad. A neat Pacific led the way. From the Union Station, the line northward traverses an industrial district and soon becomes a single track, plays tag with the Canadian National line (also headed north), and finally settles down to a hundred-mile journey over rolling hills, through farming country and into more wooded land. At Medonte, Ont., a branch turns west through the woods to Port McNicoll on beautiful Georgian Bay. Here, after crossing a high, wooden, curved trestle, our *Steamship Special* came to a stop on the end of a dock, with those same attractive lawns, flowers and stations so typical of the CPR for 3000 miles across the continent. On the right, a few feet away, was a white, trim lake-steamer, the CPR *S.S. Assiniboia*. The *Steamship Special* and its crew laid over at Port McNicoll until the next day to meet another steamer coming in from Lake Superior.

The same service which exemplifies CPR trains and hotels extends to the lake steamers: comfortable rooms, superb meals, perfect service, and a friendly manner. Not only does the two-day lake trip break a long rail trip through country of somewhat monotonous scenery, but the water route furnishes a popular shortcut (in miles, not in time) to join the CPR main line at Fort William on the northern shore of Lake Superior. Of interest to railroad enthusiasts is the stop at Sault Sainte Marie, Ont., more often known as the Soo. While time was limited, we had a glimpse of the little-known Algoma Central & Hudson Bay Railway. For this road, Sault Sainte Marie (a northern city to most of us) is the southern terminus. Also at the Soo is a curious bridge, large in size and looming up from some distance away, but which seems to (and does) rest in a field. It parallels the old locks on the Canadian side. Looking like a truss bridge ironically built in the wrong place or like a gigantic spare part, it is in reality an international connecting link. Because boat traffic through the Soo Locks is far more frequent and important than rail traffic, the bridge is kept clear of the locks, but when swung on its dry-land pivot, it joins the CPR with two of its American subsidiaries: the Soo and the Duluth, South Shore & Atlantic. Another section of



Linn H. Westcott.

this same crossing, a bascule bridge over the American-side locks and canal, crashed early in October, 1941, under the overweight of a DSS&A freight locomotive, drowning the engine crew and tying up vital national-defense ore shipments for many days.

After the Soo Locks we were quickly out of sight of land, and it was the next morning before the CPR Great Lakes Service turned its well pleased guests over to the rail lines again. The change was made at Fort William, Ont. Before disembarking there we made a brief stop at Port Arthur. These are twin towns. Both have the biggest and most numerous grain elevators I have ever seen. They rise like giant sentinels along the flat lake shore. Port Arthur was developed primarily by the CNR, and Fort William by the CPR. The lake ports are directly on the main line of the CPR, but the transcontinental line of the Canadian National runs a hundred miles north, with an important bypass from Winnipeg swinging down to make the Great Lakes connection. Some idea of the importance of the rail-boat transfer for grain is suggested by a look at the CPR map. From Fort William all the way to Winnipeg, 425 miles, there is a double track, while eastward for 510 miles is only a single line, made up in part of what many engineers consider the most difficult railway construction in the world [June 1941 TRAINS]. This section eastward along the north shore of Lake Superior, the coldest and bleakest in all Canada except

North American circle trip.

The trip for Bill Moore and his wife started at Buffalo, but it could as well have started at any other point on the route. High spots included the Canadian Rockies, the optional steamship route on Lakes Huron and Superior, the narrow-gauge, spectacular White Pass & Yukon Railroad in Alaska, the Southern Pacific's Cascade and Coast lines, the side trip to Grand Canyon National Park from the UP at Lund, Utah, the heavy traffic on the Union Pacific main line, and the railroad terminals in Chicago.

the very far north, contains bottomless muskegs, where stone and soil disappeared completely and even great mattresses woven of trees rose and fell with each passing train.

But it was westward we were headed.

The double line to Winnipeg passes through rolling country, much of it heavily wooded and broken by large and beckoning lakes. The Canadian war effort has spurred traffic noticeably. Long freights pass with great frequency. Some of the trains we saw were solid grain movements, but much heavy timber could be seen moving east from British Columbia. The westbound freights were hauling tractors, machinery, and general merchandise.

The Great Lakes boat connection makes a great deal of difference to westbound CPR No. 1, which leaves Montreal, 989 miles to the east, two nights and a day before. On Summer Mondays and Fridays there is a diner, observation-lounge, and several sleepers from Fort William to Winnipeg and Banff; on other days, coaches, colonist cars, and tourist sleepers are the main consist of leisurely No. 1. The day trip to Winnipeg is a pretty one. In the Ignace-to-Kenora area, large, deep-blue lakes lie on both sides of the tracks, and many Summer cottages are partly visible through the trees.

The station flower display at Kenora is gorgeous. The stone walls of a cut are solid hanging-gardens of petunias and other gay flowers. The CPR would seem to cultivate 90 per cent of all the petunias in the world. At large stations, at smaller ones and at switch shanties miles from nowhere, a neat grass plot and borders of petunias are always to be seen. This layout is as common as the dark red paint which is uniformly applied to every structure owned by the railway, be it station, water tank, signal box, or tool house. In some of the small communities, only the railway property seems to have ever felt a paint brush.

We divided our time pleasantly between watching the scenery slip away from the observation windows and enjoying the excellent CPR meals served in attractive diners. On this and every other diner, waiting at meal times was the usual thing because travel was heavy; and with long jumps, we were informed, it was impossible to spot a spare diner or arrange for extra ones. The menus were large and attractively arranged, and it was in order on all trains for anyone to take along one or a whole collection of menus, if desired.

Coming into Winnipeg after dinner, one sees the largest classification yards in the world—the CPR layout to accommodate grain cars from many main and branch lines on the Western prairies. The CPR station at Winnipeg is typical of the whole system—large, heavily built, conservative in design and aging a little, but still good for many years to come. As in so many CPR cities, a fine hotel—the Royal Alexandria, at Winnipeg—is connected to the station. This European touch of a railway-owned, railway-operated, railway-featured hotel is not followed in the States. Occasionally railway money goes into a hotel, such as the Hotel Pennsylvania in New York City, but the operation is not in the hands of the railroad company. In Europe, the British Isles and Canada, the arrangement seems to work well, and it is curious that it never spread south of the Canadian border.

Engine servicing at Ignace, Ont.

Of the CP's 65 Hudsons, 45 are semi-streamlined. An unusual feature of the design is the lack of steam and sand domes. The Elesco feedwater heater has been lowered and is less noticeable than usual.

As train No. 1 takes a tedious time to cross the prairie and arrives at Banff at 1:45 a. m., it was better to accept the hospitality of the CPR's hotel at Winnipeg, with its lobby as big as Grand Central Terminal, only bigger, than to remain on the train. This gave us time to go to the other end of town to see the handsome CNR station and its adjoining hotel, the Fort Garry, with the most attractive lobby and prettiest lighting of any railway hotel we had ever seen. After plenty of time for a good rest and also for a good look around the Winnipeg terminal, it was 10:20 a. m., and the westbound *Dominion,* train No. 7, was ready to pull out. No. 3, the coach and tourist car section, had already gone. Both trains stay in Winnipeg a full hour, but are given such a thorough going-over that there is little wasted time. Cars are cleaned, windows washed, and supplies stocked up for the long trip to Vancouver. On one average Summer day, the consist of No. 7 west from Winnipeg was a baggage car, three tourist sleepers (two of them CNR) and a special Red Cross hospital car, all occupied by troops returning from England; then seven standard sleepers or compartment cars with a diner in the middle, and finally a well appointed observation-lounge. It is interesting to note that the CPR, while operating its own sleeping cars, follows the Pullman Company nomenclature in naming cars according to their accommodations. For example, for both Pullman and the CPR, the *Glen* series is all-compartment cars and the *Mount* series is observation cars with three compartments and a drawing room at one end.

For the rail camera fan, the trip across the prairies is a happy one. Several of the 15-minute stops are at stations not cluttered up with butterfly sheds and closely placed posts, as invariably occurs in the larger cities. At Brandon, Man., running two hours late, we met both eastbound No. 4 and No. 8, the two Summer sections of the *Dominion.* At Broadview there was another opportunity for pictures. By 8 p. m., during a half-hour pause at Moose Jaw, the light was unfortunately failing, and more photographs were out of the question.

Some fast running was made on the prairies. Part of the lost two hours mentioned above was made up before bedtime and the remainder during the night, for No. 7 was right on time at Calgary the next morning.

CPR No. 1 at Winnipeg.

The Canadian Pacific's No. 1 locomotive, the *Countess of Dufferin,* sits in a scenic setting in Winnipeg, kept in fine condition (top). The middle view is the same station stop shown on page 37, but photographed from the rear of the train instead of the front. Count the cars! Servicing of a transcontinental train is a big job (bottom). Water tanks must be filled, ice loaded into ice-cooled air-conditioning apparatus, and perhaps dining-car provisions must be added.

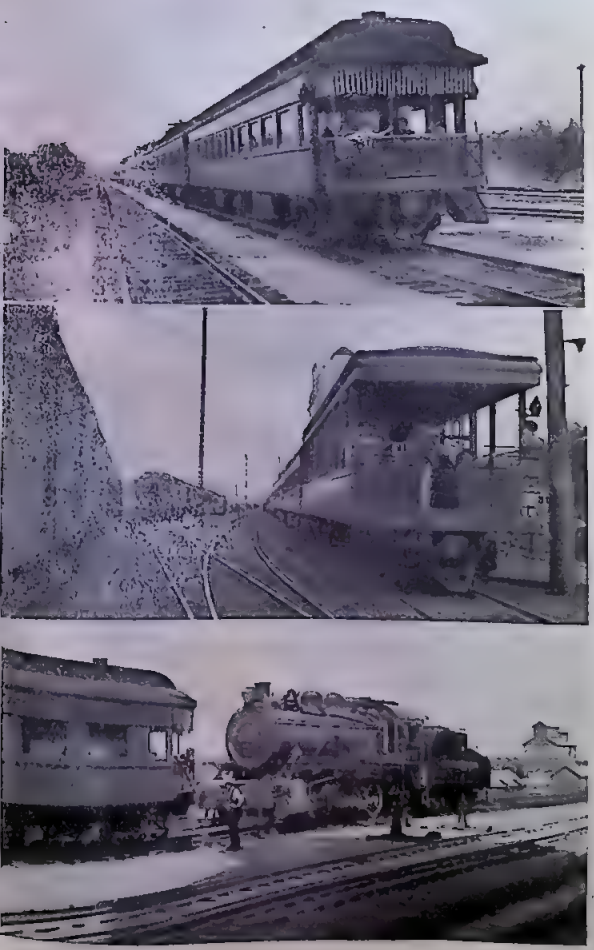
The extent of the prairie country can be visualized when one wakens just east of Calgary and sees exactly the same fields, the same small communities, the same dirt roads, the same flat land reaching to the horizon as

one saw when darkness came the night before, more than 400 miles to the east.

Excitement and interest picked up coming into Calgary, because, far to the west, lighted by the early morning sun, we could see the Rockies, looking at first like a mirage and then seeming quite real even though 60 and more miles away. Calgary is a flat, prairie city, but very much the gateway to the mountains. Here an open observation car was coupled to the rear of the observation-lounge. Its middle third was enclosed with big glass windows and had old-fashioned plush seats inside. The two end thirds were entirely open except for a high roof. The seats were wooden, and iron rods along the side kept most camera enthusiasts from tumbling over the side. The big-wheeled engines which took the rolling prairies in their stride glanced disdainfully at the mountains and decided to head east again from Calgary, so a streamlined 2-10-4 in the 5900 series took over with the proud knowledge that this class has negotiated the Rockies successfully for the past 10 years.

The classic observation car.

Below is the *Dominion* at Calgary before and after the open observation car is attached for the ride into the Canadian Rockies. The standard observation car on the train is of the classic open-platform type, so much mourned these days. At bottom is a switcher getting ready to help the train start from Brandon station.



No sooner had the large classification yards narrowed through the throat leads into a single main track, even before the city limits were reached, than the grade was readily apparent, and it is definitely up! The land is still treeless but the hills are more rolling. An alliance between the railway and the Bow River becomes closer and closer as the miles fly westward, an alliance lasting all the way into the heart of the mountains and to Lake Louise. The paved highway west from Calgary also keeps close to rail and river. Even the planes overhead follow the same route. No longer are there long, straight stretches of track. A continuous series of curves sweeps to the left and right. The grade is constant, and steep. From the open observation, the locomotive and entire train can be seen first on one side and then the other. The passing sidings come about every six miles and are long. On practically every one was a lengthy freight, either eastbound or westbound. No sooner had No. 7 passed than the freights were in motion again. The westbound trains, although carrying mostly empties, tried to keep moving slowly on the passing tracks to avoid a complete stop on the upgrade.

The real mountains begin with g r e a t abruptness. At their base and on the lower reaches is an abundance of trees, above which the barren rock sides seem drab in color but impressive in their massiveness. The Bow River is crossed several times as the mountains pinch both the tumbling water and the climbing rails into a narrow channel. We took a siding to let eastbound No. 2 pass, but there were no other stops until Banff was reached. There, more than half the train passengers alighted, either for a stay at the gorgeous Banff Springs Hotel, CPR-operated, or to take the popular two- and three-day

side trips by motor bus, rejoining the railway at Field, 54 miles to the west.

The motor road from Banff to Lake Louise keeps close to the CPR main line, which is straight up the Bow Valley, with rows of snowcapped peaks on either side. It is from Lake Louise, or, more accurately, from Hector to Field, that a most astounding engineering design drops the main line down the narrow gorge of the Kicking Horse River after passing over the Continental Divide at Hector. In this section are the famous spiral tunnels [December 1940 TRAINS], used to avoid switchbacks in territory so rigidly hemmed in that there are no side canyons nor flat valleys in which altitude can be lost (westbound) or gained (eastbound) in a short distance. From the highway we had a good view of the spiral tunnels, one below the road and the other above it. The sight was impressive, and I'll long remember an eastbound freight with two pushers fighting the mountain through the upper tunnel. In contrast, a hand car was coasting downhill through the lower tunnel at the same time!

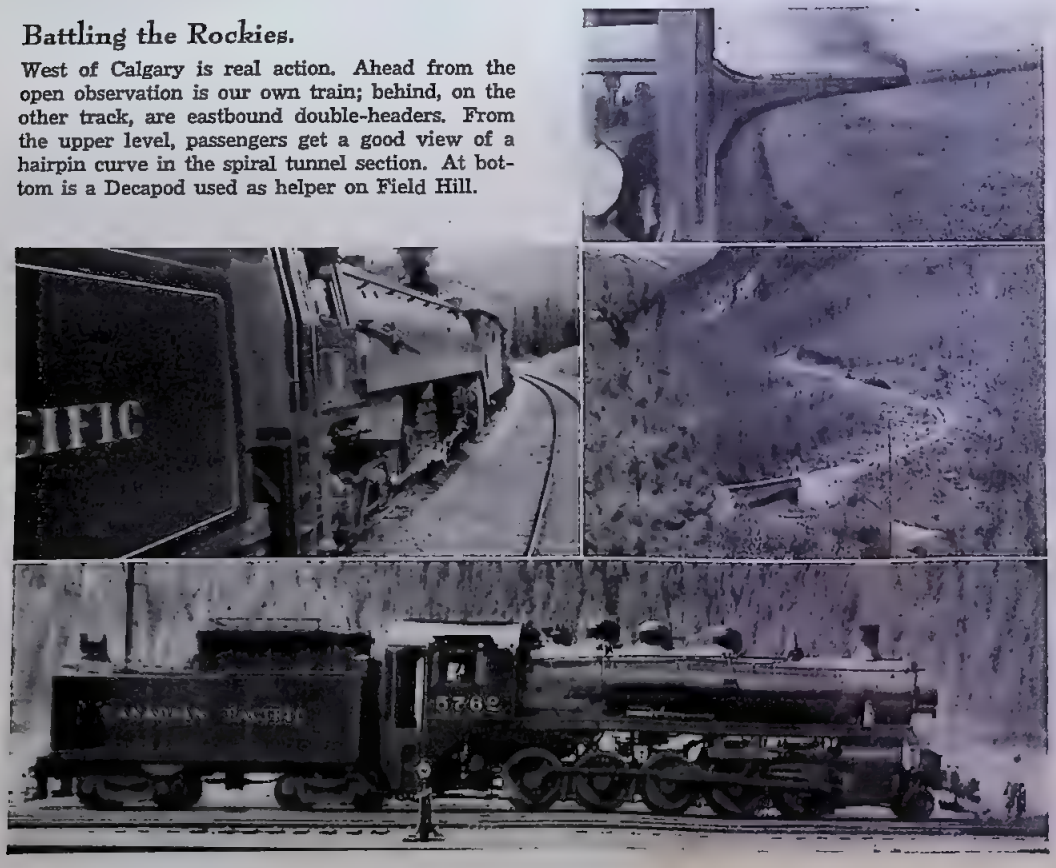
Station stop in the mountains.

The *Dominion* rolls into the station at scenic Field, B. C., with the Selkirks towering in the background.

At Field, we rejoined familiar No. 7, but this was the train which left Montreal the day we reached Banff, for it was now three days later. We were glad there was no hitch in our compartment reservation, as the train was crowded both with Summer travelers and soldiers. Just after leaving Field on the steep downgrade, we took three sidings in quick succession, first for eastbound No. 14, the *Mountaineer*, a shiny Summer job of the CPR and Soo, bound for Chicago. Then No. 4 came along, followed 20 minutes later by its Summertime twin, No. 8. These trains had 2-10-4's working "all out" up the Kicking Horse Gorge. There are many snow-covered peaks, some small glaciers, and rugged scenery as far as the eye can see.

Battling the Rockies.

West of Calgary is real action. Ahead from the open observation is our own train; behind, on the other track, are eastbound double-headers. From the upper level, passengers get a good view of a hairpin curve in the spiral tunnel section. At bottom is a Decapod used as helper on Field Hill.



After keeping out of the way of the three passenger jobs we met several freights before reaching Revelstoke at dusk. On this stretch we took 15 minutes to pass through the famous Connaught Tunnel, seven miles in length.

No one was allowed to stay on the open observation platform in the tunnel. Guards with fixed bayonets were at either end, and other guards protected the numerous steel arch bridges which span deep ravines beneath the main line where it hugs the side of the mountains, gaining altitude again after leaving Revelstoke.

The scenery and engineering in the Selkirk Range is remarkable, but the *Dominion* traversed much of it at night. The mountains spread out over such a large part of the western section of the continent that it is not possible to see everything in the daytime without long layovers. It was on this run that the diner was more crowded, the wait was longer and the overworked steward was more exhausted than on any other part of our 10,000-mile trip. When we ate, 195 dinners had already been served, and people were still waiting at 10 p.m. For breakfast, before reaching Vancouver, the meal situation was better in hand, as a relief diner was picked up during the night at North Bend. Heavy movements of soldiers and officers, of which there is no advance notice, complicate the diner problem.

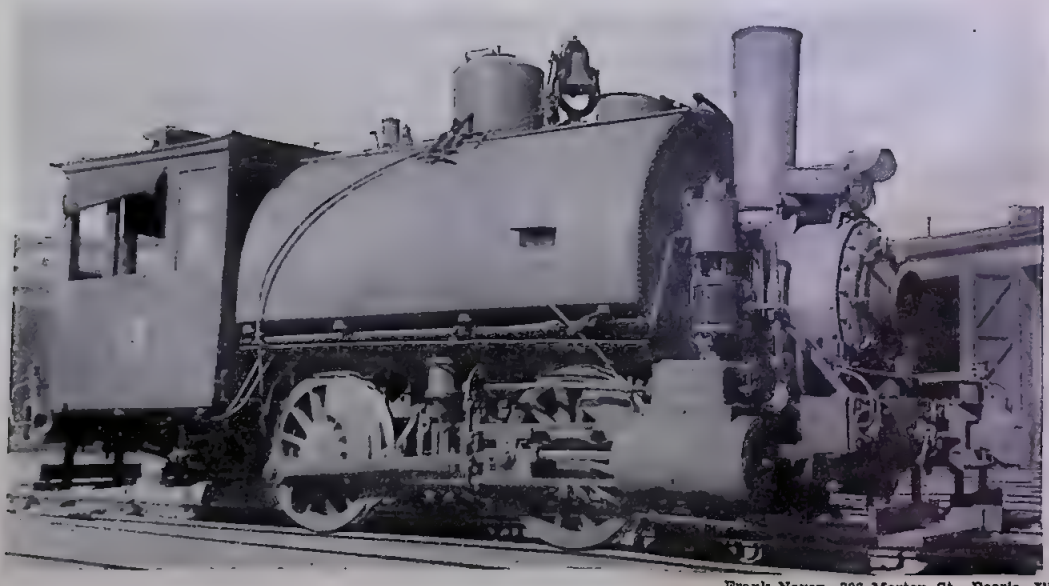
The double line into Vancouver follows the busy Fraser River. The transcontinental run ends in the CPR station, close to the CPR docks. In peace time, regular liners departed for Hawaii, Japan and the Orient, but the war has canceled all scheduled Pacific runs, and those that are made are given no advance publicity. The busy coastwise vessels still ran—to Alaska, to Victoria and Seattle, and to many small communities and resorts on Vancouver Island. For the terminus of so great a cross-country system, the Vancouver station seems small, but there is no commuter service, so that only three transcontinental trains arrive and depart each day, with but two additional locals.

Here ended our trip across Canada, and here began our ride via steamboat to Skagway, Alaska, and thence over the White Pass & Yukon Railroad, up the 3.9 per cent grade and through some of the grandest scenery in the world to Whitehorse. But that is another story—for next month.

Paul H. Stringham, Rock Island News Stand, Peoria, Ill.

The ubiquitous Rock Island.

The Chicago, Rock Island & Pacific runs a lot of places, but not to the Pacific. It goes from Chicago to Minneapolis, although you might never think of it in connection with this route. It goes to Denver and Omaha, and to Galveston on the Gulf. Rock Island rails even connect St. Louis and Kansas City, although the nine-hour day local is hardly competition for the five-hour trains on other routes. The streamlined *Rockets* offer fast passenger service on the main line west of Chicago and southwest to Peoria, between St. Louis and Minneapolis, Memphis and Amarillo, Tex., and between Houston and Fort Worth. On almost every count—territory served, type of traffic—the Rock Island is the less-known twin (no connection except similarity) of the Burlington, and like the Burlington it even operates an extensive Chicago suburban business. Below is Rock Island No. 3 at Silvis, Ill., a little 0-4-0 tank engine used as roundhouse switcher.



Frank Naven, 306 Morton St., Peoria, Ill.

Paul H. Stringham.

Fast local train and freight from Peoria.

The short, intensive route between Chicago and Peoria is practically without competition. Both pictures were taken at Chillicothe. At the top of page 44 is a redball freight headed by Mikado No. 2599, Class K-64, while the photo above shows what is probably one of the fastest local passenger trains in the country, No. 210, which makes the 47 miles from Peoria to Bureau in one hour flat including three regular stops. It is moving about 80 miles an hour behind Pacific 886, Class P-33. The letter in Rock Island classification indicates type of engine; the number, thousands of pounds tractive effort. At bottom of page is the crack *Golden State Limited*, a luxury train to the Pacific Coast run over Rock Island as far as Tucumcari, N. Mex., and thence over Southern Pacific via El Paso and Tucson. Notice trackside ramp in foreground for intermittent Regan train-control system, now being replaced on Rock Island by modern continuous-coded train control.

Frank Naven.

L. B. Herrin, 7864 East End Ave., Chic. o, Ill.

Ferdinand Railroad, a little Indiana line.

Huntingburg, Ind., is a junction city on the Southern Railway, which, as even Midwesterners often forget, traverses Indiana and Illinois with its St. Louis line. A banking town with 3440 population, Huntingburg has wood products factories, a coal mining and shipping company, a wagon works, and a furniture company in addition to the usual general stores and other retail establishments. And it has one end of the Ferdinand Railroad, shortest line publishing a tariff and timetable. Twice a day (except Sunday) the Ferdinand's one locomotive, the No. 3 (above) leaves Huntingburg with freight and the combination car, an ex-Indiana Railroad interurban coach, for the 7.38-mile run southeast to Ferdinand. For a liesurely half hour the train meanders along Huntley Creek and then comes to a stop in Ferdinand, typical rural town of 900 people, a general store, and a glove works. Here is the Ferdinand Railroad's office, and here is the reason for its existence. In the 1929 I. C. C. consolidation plan the Ferdinand was assigned to the Southern. Switching and makeup of the train at Huntingburg is by gravity without use of the engine.

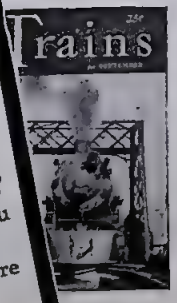
Next month:

Lake Michigan Shortcut
Freight trains cross the Great Lakes.

Narrow Gauge in Alaska
Bill Moore's trip continues.

Do You Know Railways?
The best-quiz-ever tries you out.

Pictures, maps, stories, more pictures.



"If the shippers and consumers of this coal want to help win the war, they will ship and buy and stock all the coal possible in the spring and summer months." JOSEPH B. EASTMAN, *Director, Office of Defense Transportation.*

* * *

"A full coal bin is the best possible insurance anybody can have against a wartime coal shortage." H. A. GRAY, *Acting Director, Office of Solid Fuels Coordination for War,* HAROLD L. ICKES, *Coordinator.*

* * *

"To produce and transport the tremendous quantity of oil required for war, we need, and will continue to need, the ever greater efforts and cooperation of every individual." HAROLD L. ICKES, *Secretary of the Interior and Petroleum Coordinator for War.*

AMERICA today is pouring out war materials faster than all the Axis powers combined.

The months ahead will see production of guns, tanks, planes, ammunition in a rising flood beyond anything ever imagined.

That's putting on the heat—and it takes *heat*—to do it.

It takes millions of tons of coal—millions of gallons of oil—to keep America's war factories booming.

Production of bituminous and anthracite coal, most of which moves by rail, has been stepped up to *nearly 12,500,000 tons a week.*

About 750,000 barrels of oil a day are rolling into the East by rail—*more than 50 times the volume the railroads normally bring in.*

The railroads will keep right on doing their part in "putting on the heat" to the best of their ability. But there *is* a limit—set by the number of tank cars and coal cars in existence.

And that's where *you* come in.

In normal times, one coal car in every four is needed to move fuel for home-heating.

If you fill your bins *now,* that means more cars—more power—more heat to keep our increasing production program going full speed ahead through the winter.

Buy the rest of your coal now and help put the heat on Hitler!

ASSOCIATION OF

AMERICAN RAILROADS

WASHINGTON, D. C.

Letters

★ Interesting sidelights on railroads as readers observe them.

Norwich & Worcester Railroad.

I HAVE just read the June issue of TRAINS. The article on the New Haven Railroad—telling of the observations of an English lad at New London, Conn.—I found interesting!

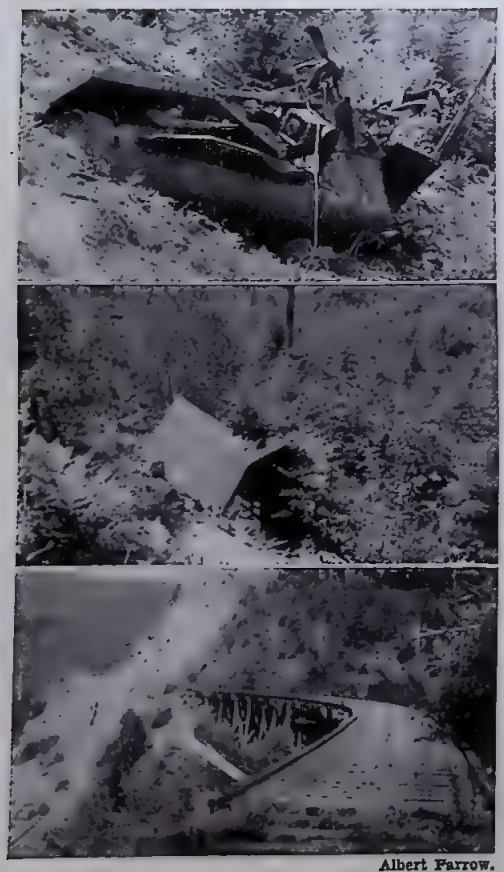
The English boy speaks of the line that turns or runs north at the east end of the bridge over the Thames River at Groton, Conn. This line is especially interesting. In theory, at least, this is a separate railroad, known as the Norwich & Worcester Railroad Company. It has its own president, treasurer, board of directors, offices, and capitalization. It is one of the earliest railroad companies in New England (if not the United States). The line extends from Groton, Conn., 71 miles north to Worcester, Mass., and is single track most of the distance.

With the exception of the electrically equipped sections of the railroad, the heaviest trains on the New Haven system normally operate over this line. Although freight-traffic density is high and forms most of the tonnage, it is interesting to note that on certain Summer weekends the *State of Maine Express* comprises from 12 to 14 sections, all using the Norwich & Worcester.

Originally the line ran from Worcester to Norwich, Conn. (hence the name). At that time the railroad owned boats and thereby transported passengers and freight onward to New York City. When this method was outmoded, the railroad was extended from Norwich to Groton, where connection was made with the New Haven.

At present the N&W is under a 100-year lease to the New Haven. The lease, which terminates in 1969, calls for payment of interest on bonds and $8 a share on stock to N&W stockholders. It is something to think of when you realize that stockholders of the Norwich & Worcester have received $8 a share [except $6.50, 1938; $6, 1939.—*Ed.*] per year without interruption, I believe, for over 70 years!

James A. Hutchinson Jr.
35 Congress St., Boston, Mass.



Albert Farrow.

Wreck of the Heisler.

HEARING persistent rumors of a wrecked logging engine abandoned up in the Cascades, Emery Roberts and I made a trip to look for it. We rode the Northern Pacific's train No. 4 to Eagle Gorge and then hiked up the old roadbed of the Buffelen Lumber & Manufacturing Company in search of the ill-fated smoker.

After threading our way through three-inch alders now growing between the rotting

Abandoned where she lay.

Six miles from Eagle Gorge, Wash., this wrecked logging locomotive today lies just as she did some 20 years ago after lurching from the rails during a runaway trip down the mountainside. Notice the fir tree growing through the tender (center). The air pump lies just ahead of the tender. Bottom photo is of a trestle on the abandoned right of way.

ties, and walking over some 14 bridges, we came upon the Heisler scattered over the hillside. The brush almost completely hid her, but we were prepared for that, and we chopped and whacked for about two hours before we had enough of the engine showing to make a good photo. She is still lying there today as she did some 20 years ago after she ran away on a trip down the hill, jumping the track and spreading all over.

Albert Farrow.

138 10th St., S., Auburn, Wash.

Traffic Increases.

THE little branch lines are coming back into their own now. A friend of mine has the Pine Island Branch of the Erie in his dooryard. He explained that he didn't mind; the railroad only ran one train a day, and that was just three or four cars. Now he is getting a 70- or 80-car train about once an hour.

Charles D. Robinson.

234 Grand St., Newburgh, N. Y.

[This might explain how the Erie is able to declare a dividend this year, for the first time in three-quarters of a century.—*Ed.*]

He's Planning Some Trips.

MY BOY and I are planning a trip to Campbell Hall, N. Y., following the suggestion in June TRAINS. We would like to ride No. 9 to Middletown, spending the night there (since old towns and old houses are as interesting to us as railroads). We want to spend a Saturday around Campbell Hall and Maybrook, in the hope that we will see, among other things, some of the NYO&W mountain specials, then return to New York, probably by the *Lake Cities*, on Sunday.

Another trip we are planning is a hike over the route of the Susquehanna & New York, from Marsh Hill Junction to Towanda. Just at the moment, this pike is in the hands of the tearers-up, but after that excitement dies down it will be fun to retrace the route through some of the wildest country in the East, including two real ghost towns—Masten and Laquin—both of them once roaring lumber towns, and the latter once boasting of the biggest saw mill in the East.

Incidentally, if you are spooking about in the East at any time, for real picturesque old-time railroading look in on Galeton, Pa., on the former Buffalo & Susquehanna (now B&O), and St. Marys, Pa., on the Pittsburgh, Shawmut & Northern, which, I believe, is still popping off steam. It has been some years since I was up there, but I would like to go this Summer, gas rationing permitting.

Heydorn Schleh.

2938 Westfield Ave., Camden, N. J.

[Why not ride the train? Pennsy has good connections to St. Marys, Erie and B&O to Galeton.—*Ed.*]

Special Car for Invalids.

ONE night some weeks ago I saw the Pullman car *Ephriam McDowell*, which had the appearance of a standard Pullman except that, in addition to the usual platform doors, it had three other doors on one side only. Upon inquiry I learned that this is an invalid car, used to transport passengers in wheel chairs and on stretchers.

We all know that it takes cars to make up a train, but just what kind of cars and the differences in the various types, I believe, would make subject matter for many an article.

Edgar J. Kunze.

6644 N. Washtenaw Ave., Chicago, Ill.

New railroad book.

BULLETIN NO. 58, RAILWAY & LOCOMOTIVE HISTORICAL SOCIETY. 80 pages, 6" x 9". $2. Published by the Society, Baker Library, Harvard Business School, Boston, Mass.

THE Chesapeake Beach Railway offered the unusual spectacle of a Western railroad builder, Otto Mears of Colorado, building an Eastern railroad with Western capital furnished by David Moffat of Denver. The history of this Washington (D. C.) project furnishes one of the illustrated features in the R&LHS's fifty-eighth bulletin. Other features include a biography of Bion Joseph Arnold, prominent railroad electrical engineer and inventor, a discussion of three-cylinder locomotives, a review of the locomotive builders of the United States, and an interesting account of the Prairie du Chien pontoon bridge by which the original line of the Milwaukee Road crosses the Mississippi River.

The Month

★ Carloadings decline as ton-miles increase: 1942 paradox.

★ Although May carloadings were 4.3 per cent below the 1941 level, the railroads carried far more freight far more miles than ever before. The magazine *Time* found this fact so significant that it heralded the news under the heading "Railroads: Give Them an E Flag Too." Shippers, said *Time*, have stopped worrying about a car shortage at the 1942 Fall peak and have begun to worry about a shortage of locomotives instead.

Last year carloadings never rose more than 90,000 over the May average. At last year's peak of 922,000 carloadings there were still 40,000 cars in reserve. This year there will be 67,000 more cars in service (80,000 new cars, less 13,000 scrapped). The situation should still remain well in hand this Fall even if loadings rise twice as much as last year from May to October.

The average load this year is perhaps five tons more than in 1941, 10 tons more than 20 years ago. Shippers everywhere are cooperating in the campaign for fuller cars. One cement shipper saved 600 cars in one month; 36 instead of 18 hogsheads of tobacco per car cut a tobacco shipper's requirements by 463 cars. Less-than-carload-lot shipments of less than six tons have been banned by O. D. T., cutting May's l. c. l. carloadings 251,950 below last year's 630,937.

Another factor in the paradox of more ton-miles with fewer carloadings is an increase in length of haul. Last year's movements averaged 367 miles; this year's, it is estimated, well over 400. Many commodities formerly shipped from West to East and vice versa by way of the Panama Canal are now going by the more direct rail route. Cars formerly returned empty are now going back full. Net ton-miles per freight-train-hour are 20 per cent more than in 1939, and double the 1922 figure. Locomotives are giving 160 per cent more service than they did in the last war.

Revenue ton-miles for January and February were up 31 per cent over the same months in 1941, 83 per cent over 1939, and 17 per cent over 1929 (when there were 7400 more locomotives and 500,000 more freight cars than now).

★ Hell has frozen over! The Erie, on June 19, declared a dividend of 50 cents a share applying equally to common stock and certificates of beneficial interest—the first common-stock dividend to be paid by any Erie company since 1866. (*Railway Age* points out, however, that in the recent Erie reorganization some fixed-interest obligations were exchanged for common stock. The improved Erie position is typical of other recently reorganized roads which have likewise reduced fixed charges.) Combined profits of all Class 1 railroads for the first four months of the year were 149 million dollars—practically double last year's $76,200,000. The rate of return on property investment for the 12 months ended April 30 was 4.06 per cent as compared with a rate of return of 2.98 per cent for the 12 months ended April 30, 1941.

★ *Fan Trip:* August 23, from Trafford City, Pa., over West Penn System (interurban) to Irwin, Greensburg, Hecla Junction, Latrobe, back to Hecla Junction and return to Trafford City via Connellsville. Time, 10:30 a. m. Return about 8:30 p. m. $1.75. Sponsored by Pittsburgh Chapter, National Railway Historical Society. Reservations, C. J. Dengler, 1536 Rhine Street, Pittsburgh.

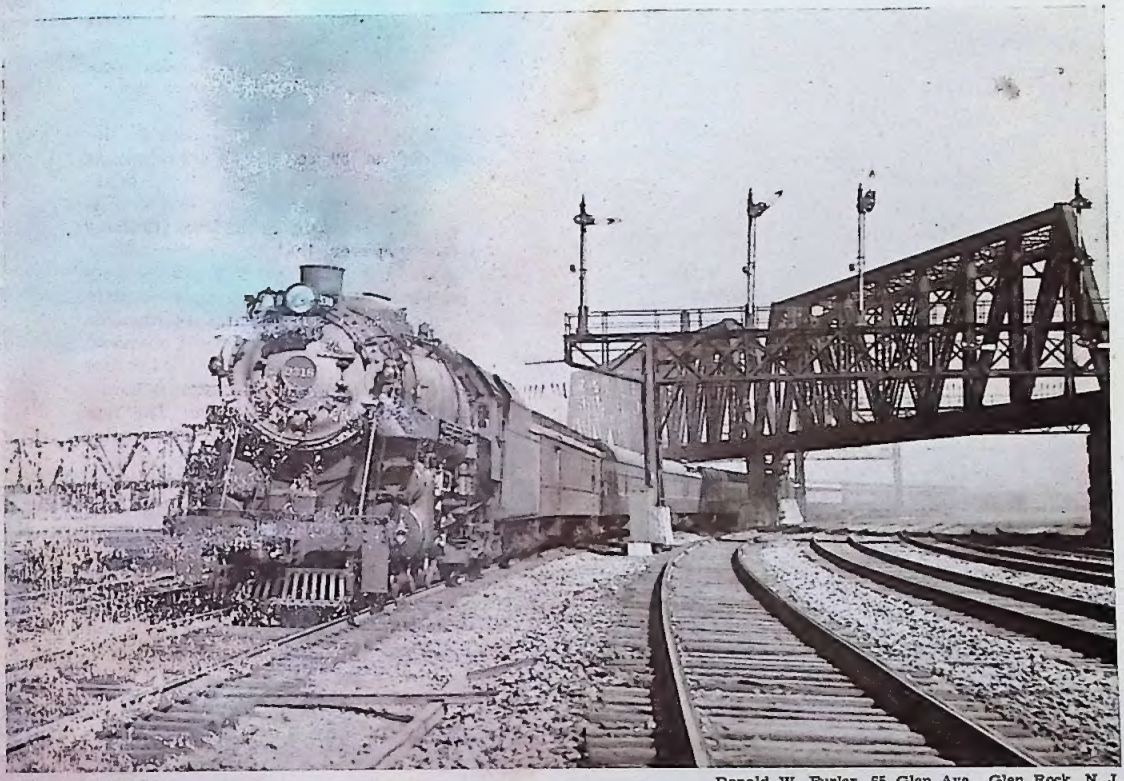
[Send notices of fan trips before the first of the month preceding date of issue or they cannot be included in TRAINS.]

★ Daniel Willard, chairman of the board and longtime (31 years) president of the Baltimore & Ohio, died July 6 at the age of 81. "Uncle Dan" was a national leader in railroad executive thought, and a pioneer in good labor and public-relations policies. He rebuilt B&O from a definite low in 1910 to the first-class carrier it is today.

★ After a lapse of 20 years the Great Northern has resumed commuter service between Minneapolis and Mound, Minn. The first train, leaving Mound at 7:15 a. m. May 25, carried 65 revenue passengers. For the present the service will be gas-electric, one train a day each way, with more cars and steam power in the offing if the traffic demands.

Oil for the cars of New England.

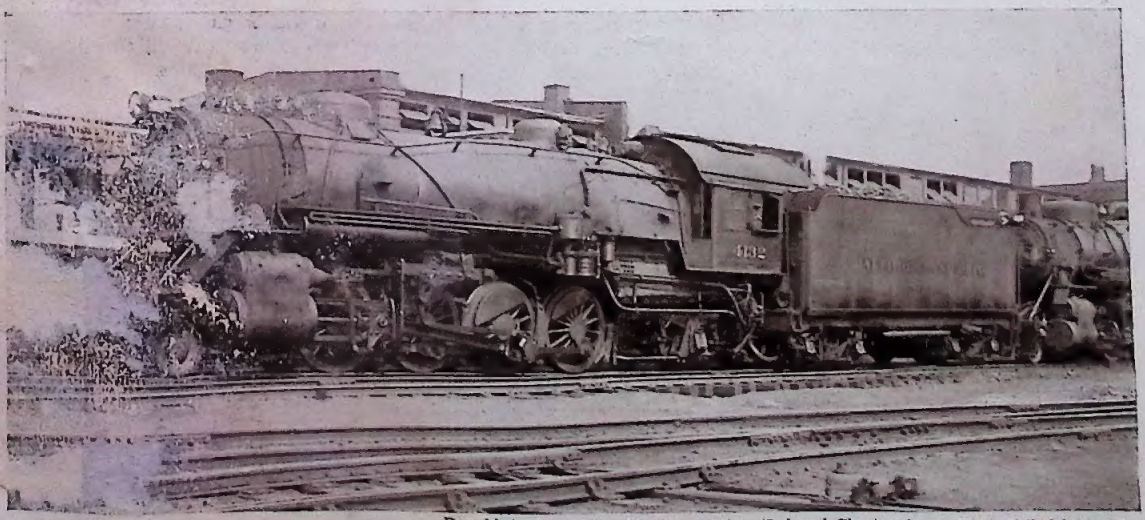
Eastern railroads are handling as high as 600,000 barrels of oil and gasoline to alleviate the shortage caused by breakdown of the tanker system of transport by water. Pictured is a New Haven train of tank cars pulling into Providence, R. I., with half a million gallons of motor fuel.



Donald W. Furler, 65 Glen Ave., Glen Rock, N. J.

B&O engines have personality.

The Baltimore & Ohio has locomotives with distinctive touches. There is a B&O look about even the prosaic Mikado (below), and no one who knows his engines could mistake the *President* class Pacific (above, the 5318, *President Garfield*, pulling the *National Limited* past Communipaw Avenue in Jersey City). It was with the *President* class that the B&O revived a colorful old American custom of naming locomotives. Each engine in the series bears the name of a United States President.



Donald A. Somerville, Monterey Apts., 43rd and Chester Aves., West Philadelphia, Pa.

Trains